



Final Evaluation of the MOMI Project in Burkina Faso, Kenya, Malawi and Mozambique

Final report

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Work Package 6: Evaluate effectiveness of postpartum interventions and services and monitor the implementation at each study site

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Work Package 7: Cross-country analysis of critical determinants of sustainability and replicability of postpartum care

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About MOMI:

The MOMI project aims to contribute to the improvement of maternal and infant health in Africa through a focus on the postpartum period, adopting context-specific strategies to strengthen healthcare delivery and services at both facility and community level in four sub-Saharan countries.

The MOMI project is a five-year collaboration between five African and three European partners, funded by the EU's Seventh Framework Programme. The consortium is composed of:

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List of Abbreviations

APE	Agente Polivalente Elementar (Mozambique)
AV	Accoucheuse Villageoise (Burkina Faso)
CHEW	Community Health Extension Workers (Kenya)
CHW	Community Health Worker
CFIR	Consolidated Framework for Implementation Research
COGES	Comité de gestion des services de santé (Burkina Faso)
CSPS	Centre de Santé et de Promotion Sociale (Burkina Faso)
CU	Community Unit (Kenya)
DAG	Directed Acyclical Graph
DHS	Demographic and Health Surveys
DHO	District Health Office
DIP	District Implementation Plan (Malawi)
EPI	Expanded Programme on Immunisation
FMUP	Faculdade de Medicina da Universidade do Porto (Portugal)
FP	Family Planning
HF	Health Facility
HFW	Health Facility Worker
HMIS	Health Management Information Systems
HSA	Health Surveillance Assistant (Malawi)
ICRH-K	International Centre for Reproductive Health - Kenya
ICRH-M	International Centre for Reproductive Health – Mozambique
IRSS	Institut de Recherche en Sciences de la Santé (Burkina Faso)
IUD	Intrauterine device
LMIC	Low- and Middle-Income Countries
MCH	Maternal and Child Health
MNCH	Maternal, Newborn and Child Health
MNDSR	Maternal and Neonatal Death Surveillance and Response
MoH	Ministry of Health
MOMI	Missed Opportunities in Maternal and Infant Health
NGO	Non Governmental Organisation
PAB	Policy Advisory Board
PACHI	Parent and Child Health Initiative (Malawi)

P4P	Pay-for-Performance
PMT	Programme Management Team
PPC	Postpartum Care
PPFP	Postpartum Family Planning
PPA	Postpartum Anaemia
PPH	Postpartum Haemorrhage
PPS	Postpartum Sepsis
SAB	Scientific Advisory Board
TBA	Traditional Birth Attendant
UCL	University College London (UK)
VSLA	Village Saving and Loans Associations (Kenya)
UEM	Eduardo Mondlane University (Mozambique)
WP	Work Package

Executive Summary

Background

The Missed Opportunities in Maternal and Infant Health (MOMI) programme was initiated in February 2011. The primary objective of the study was to integrate service delivery and to strengthen health systems to improve the uptake and delivery of evidence-informed postpartum care both in the community and health facilities. Using participatory methods in each setting – Kaya district in Burkina Faso, Kwale County in Kenya (Matuga constituency), Ntchisi district in Malawi and Chiuta district in Mozambique – a package of postpartum interventions to increase demand for postpartum care and to improve delivery of postpartum care were designed and developed, tailored to the implementation gaps identified from an initial situation analysis and participatory workshops. This evaluation thus aimed to uncover how the interventions implemented resulted in increased uptake, frequency of delivery and quality of evidence based postpartum care and, in particular, what worked, for whom and within which contexts.

Evaluation Strategy

This evaluation was approached in three parts. The first part consisted of an impact evaluation, based on MOMI monitoring data for each site. A visual analysis was initially conducted relating the occurrence of particular events concerning MOMI intervention implementation to observed trends of relevant indicators on graphs. Findings from this impact evaluation were compared to the findings of a realist evaluation to determine if the programme theory was plausible given the data, and also to determine if the data was plausible given the programme theory. The second part involved an evaluation of implementation strength where each of the four sites was scored on key domains: the dose, duration, intensity, specificity and fidelity of the intervention implemented. The last part was the realist evaluation using an embedded multiple case study design whereby community and health facility observations were conducted and key stakeholders interviewed. Context–Mechanism–Outcome configurations to describe the ways the programme worked were tested using the case studies findings and triangulated with supplementary data and the findings of the impact and the implementation strength evaluations.

Evaluation Results (WP 6)

Interventions were carried out and implemented to varying degrees across the sites. For instance, the intervention 'dose' was high in Burkina Faso and Kenya while it was relatively lower in Mozambique and particularly low in Malawi. After a long lead-in and design phase, most sites were able to implement the interventions over a period of 18-24 months although the intensity with which the interventions were applied varied across sites. Intervention fidelity was low amongst all sites except Burkina Faso, where interventions were executed as it was originally planned.

All study sites had a community component in their intervention packages with the aim of increasing the demand for postpartum care and family planning in a critical mass of women so that it becomes, through forces of social cohesion, the 'norm'. Community health workers, chosen by their own community, were to support this change by building trust with postpartum women and by bridging the gap between the community and the formal health sector. This intervention was most successful in Burkina Faso where this change occurred. There was less success in other settings where community health workers could not reach a critical number of women due to various barriers such as low retention rate of community workers (Kenya), communities scattered over large and remote distances (Mozambique) and delayed implementation of the community intervention (Malawi).

Interventions directed at improving postpartum care delivery worked best when yearly refreshers and regular supervision were provided but were dependent upon the accountability systems operating in each setting. In Burkina and Kenya, the accountability system (Pay for Performance) was favourable to MOMI implementation. On the other hand, accountability systems were a hindrance in Mozambique where healthcare workers fear looking incapable if they refer women with complications, and in Malawi where healthcare workers are not held accountable for absence from clinical duties or for delivering postpartum care interventions. Furthermore, the lack of leadership and the fact that postpartum care is not as high of a priority at the national level than other aspects of maternal and child health had an impact on healthcare workers' motivation to implement postpartum interventions in all countries.

Service integration between maternal and infant services was also included in the intervention packages of Burkina Faso, Mozambique and Malawi. It seemed to have been

the most difficult component to implement in the three countries – where full implementation was not achieved – given the tight boundaries to healthcare workers’ responsibilities for delivering care, often compounded by separate managerial and financing arrangements for maternal care and infant care. Service integration was therefore more successful in smaller rural health facilities where responsibilities for maternal and infant care were already overlapping.

Increasing the demand for and provision of postpartum family planning was a common component to all countries. A mixture of external factors (strategy highly supported at the national level and large presence of NGOs in this field) combined with MOMI community and health facility interventions led to changed perceptions of women and to an increase in demand for family planning. However, in all countries, the main barrier to demand is the husband, who needs to provide permission, unless women are willing and able to get family planning secretly. On the supply side in all countries, healthcare workers do not spend enough time explaining to women the advantages and disadvantages of each method, even when appropriate training was provided. As a result, Depo-Provera injections remain the most administered method, despite the availability of other long lasting methods, as women are more familiar with Depo-Provera injections and it is the most convenient for healthcare workers to administer.

Discussion

We compare implementation strength across settings and discuss contextual factors that explain the variations observed. Implementation strength was best in Burkina Faso where the MOMI implementing partner was more established prior to MOMI and relationships with other organisations and other incentives such as pay-for-performance were more aligned with the goals of MOMI. We then present four broad middle range theories - which have been named “Buzz Theory”, “Bridging Theory”, “Motivation by Accountabilities” and “Together is Stronger” – that appeared to underpin whether or not the interventions implemented had an impact at the point of service delivery, despite wide variation in intervention choice, design and delivery across settings and differences within the contexts and systems within which they were implemented. Indeed, the results of the MOMI evaluation suggest that if community level interventions lead to postpartum healthcare seeking for a critical mass of women, a “buzz” for change is created. Reinforced by social cohesion and local dialogue, norms shift and appear to create a critical tipping

point leading to a social movement that holds a collective belief in the acceptability of and perceived value of attending for postpartum care that outweighs the costs. Our findings further supported the concept of social capital as having an important effect on demand for postpartum services mediated through the community health workers who could bridge trust between communities and the formal health sector. The degree to which community health workers are linked to the formal health sector, the range of roles undertaken and the way in which they were incentivised varied across the sites. However, almost regardless of these factors, the community health workers in general held a strong intrinsic sense of responsibility to their communities and, in turn, were closely relied upon by them. For the supply side interventions, the impact of MOMI was dependent upon the accountability systems that operated and largely did not favour postpartum care. In general it was found that where integration had been attempted, the staff in the better resourced health facilities were observed to have more clearly defined professional roles with little overlap between maternal and infant healthcare and therefore the combined provision of the services was less easily achieved. In a smaller facility individual HCWs were often co-located, knew about each other's roles and expected to perform overlapping functions to account for absences. The opportunity for maternal care created by infant vaccination was therefore perceived and performed more intuitively by HCWs in smaller rather than larger facilities.

Determinants of Sustainability and Replicability (WP 7)

Facilitators and hindrances of sustainability of implemented interventions were analysed. Generally, it was found that the activities must be owned by and included in the plans of the local health authorities, as strong leadership at higher hierarchical level emerged as fundamental to guarantee support and endorsement of activities. Effective collaboration among stakeholders is further needed to assure the success of interventions and enable sustainability. However, the district and/or national health authorities need to address the problem of high staff turnover, understaffing and stock outs that are barriers to sustainability. Concerns were further raised on whether health authorities will continue to focus on postpartum care and on the lack of good quality routine data to provide an actual picture of the situation on the ground. In terms of replicability, one can be confident that opportunities exist to scale up the interventions using the MOMI approach. In particular, the involvement of the stakeholders from inception, often referred to as very important, strengthens such belief.

Conclusions

While countries are making substantial progress in maternal and newborn health to achieve their goals, further improvements can be achieved by implementing innovative interventions in the postpartum period. Strengthening health systems and integrating service delivery for the postpartum period offers potential for success.

Recommendations for policymakers and implementers

Further improvements in maternal and newborn health can be achieved by implementing innovative interventions in the postpartum period. Strengthening health systems and integrating service delivery for the postpartum period offers potential for success.

Integration of service delivery requires re-organisation of care practices as well as human resources. Greater engagement and participation of the health systems leadership is necessary to bring about these changes. A whole systems approach to improvement needs to be taken into consideration rather than an intervention-focussed approach.

Increased flexibility in service provision roles are needed to encourage task sharing across different sectors such as maternal and child health to deliver truly integrated care.

Community engagement for postpartum care needs targeted interventions and investment of time and resources.

For implementers, engaging local stakeholders in the early intervention design period is innovative but it does not necessarily lead to greater ownership of the project. It can also be time-consuming. Nevertheless, stakeholder engagement is important and alternative strategies to increase local ownership of the intervention need to be explored.

Adequate investment in monitoring systems is also required to provide sufficiently regular, reliable and valid data to monitor progress in implementation of interventions in each facility and community. Such data is also required to underpin on-going evaluation efforts. The evaluation of complex interventions is also enabled via the concurrent use of a variety of approaches that can be used to corroborate each other, investigate potential mechanisms of impact, and explore the role of context and implementation strength on both intended and unintended outcomes and overall impact.

Broadening the scope of work of community health workers can provide a key resource for improving postpartum care by increasing belief in the value of proactive postpartum care within the community, increasing trust in formal health structures and facilitating access to routine postpartum care.

The forces of social cohesion have a powerful influence on healthcare behaviours. Investment in a critical mass of community actors is needed to diffuse postpartum healthcare messages.

Incentives and accountability systems for postpartum care can increase activity but indicators that take account of the quality of care provided are also needed.

Although there is evidence about what works to improve outcomes in the postpartum care, much more emphasis is needed on how these interventions can be adapted and implemented to ensure a contextual fit in practice.

Chapter 1 – Introduction

1.1 Background: Postpartum Care (PPC) in study sites

The Missed Opportunities in Maternal and Infant Health (MOMI) programme was initiated in four African countries – Burkina Faso, Kenya, Malawi and Mozambique in early 2011. The primary objective of the study was to integrate service delivery and to strengthen health systems to improve the uptake and delivery of evidence-informed postpartum care both in the community and health facilities. This is an area of care that has hitherto remained relatively neglected in many of the health system interventions designed to improve the maternal, neonatal and child health of sub-Saharan Africa, despite the fact that significant maternal and infant mortality and morbidity occurs after and up to one year from the time of delivery. The programme was initiated in February 2011 and has run for 5 years. The interventions in each site were designed to be replicable and sustainable as well as cost-neutral so that the withdrawal of MOMI support should not influence the continuation of what has been achieved.

The initial phases of the MOMI project have been described elsewhere in detail (see Figure 1 and previous work package reports: Barros & Lopes, 2013; Mann, 2013; MOMI Consortium, 2012). Using participatory methods in each study site – Kaya district in Burkina Faso, Kwale district in Kenya (Matuga constituency), Ntchisi district in Malawi and Chiúta district in Mozambique – a package of postpartum interventions were designed and developed, tailored to the implementation gaps identified from an initial situation analysis and participatory workshops. The interventions implementation varied between 12-24 months at the time of the final evaluation (see appendix 1 for detailed summary of interventions in different sites and appendix 2 for timeline of intervention development and implementation). The intervention content is based on existing evidence of clinical effectiveness. The evaluation is therefore not concerned with the effectiveness of the interventions per se but whether they have been effective in addressing gaps and optimising delivery of postpartum care and to explore explanations for how and why this might be the case.

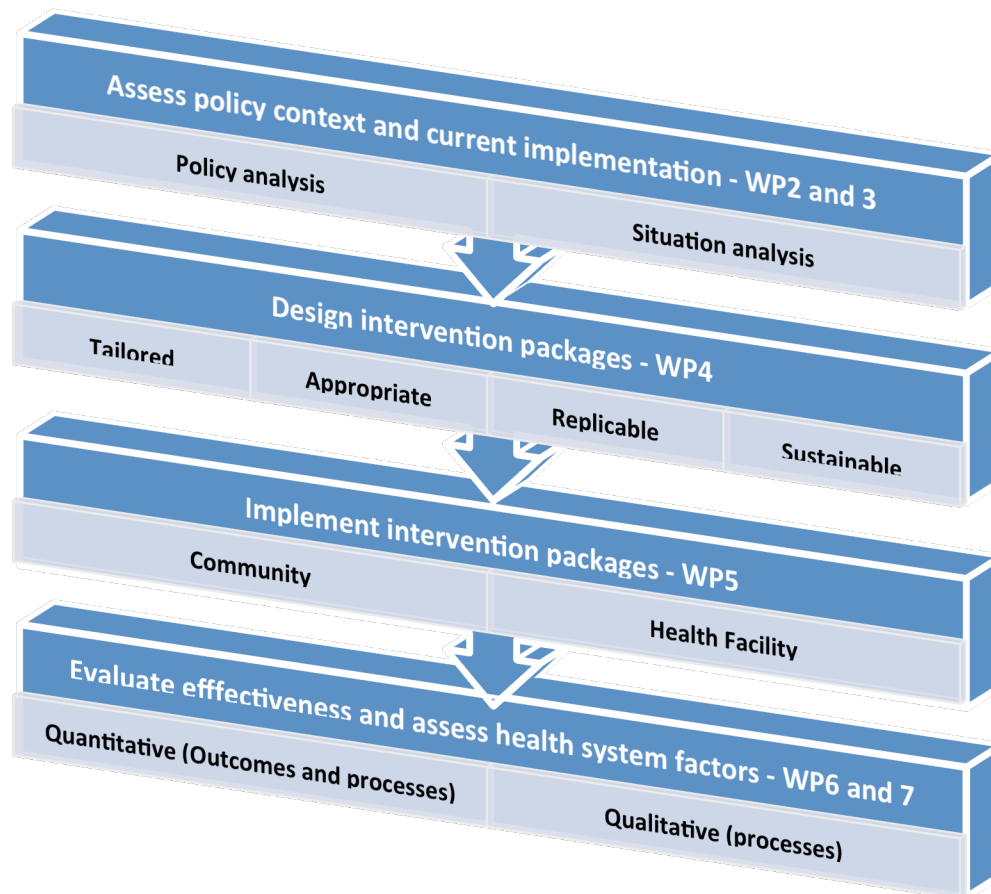


Figure 1 – Summary of the MOMI Process

1.2 MOMI Health Systems Interventions

The interventions were designed to integrate care between and across the community and health facility and to increase the demand and improve the frequency and quality of the provision of evidence based postpartum services for mothers and newborns. The health system strengthening interventions designed, based on the findings of the baseline work packages, and the activities implemented in each country setting fell broadly into the following categories, despite differing in the detail:

- 1) Strengthening immediate, early and late postpartum care delivery in health facilities and by community health workers (CHWs) – Community and health facility level interventions
- 2) Community sensitisation interventions to improve uptake of postpartum care – Community level interventions
- 3) Organisational interventions (such as service integration) to improve the accessibility and processes involved in the delivery of postpartum care

- 4) Strategic level interventions to enhance stakeholder engagement and encourage policy level shifts through policy advisory board engagement

The interventions were targeted at the gaps and/or barriers to care as identified through the preliminary work packages at each site. The recurrent themes that were identified across all sites and the level of the system at which the interventions were targeted are summarised

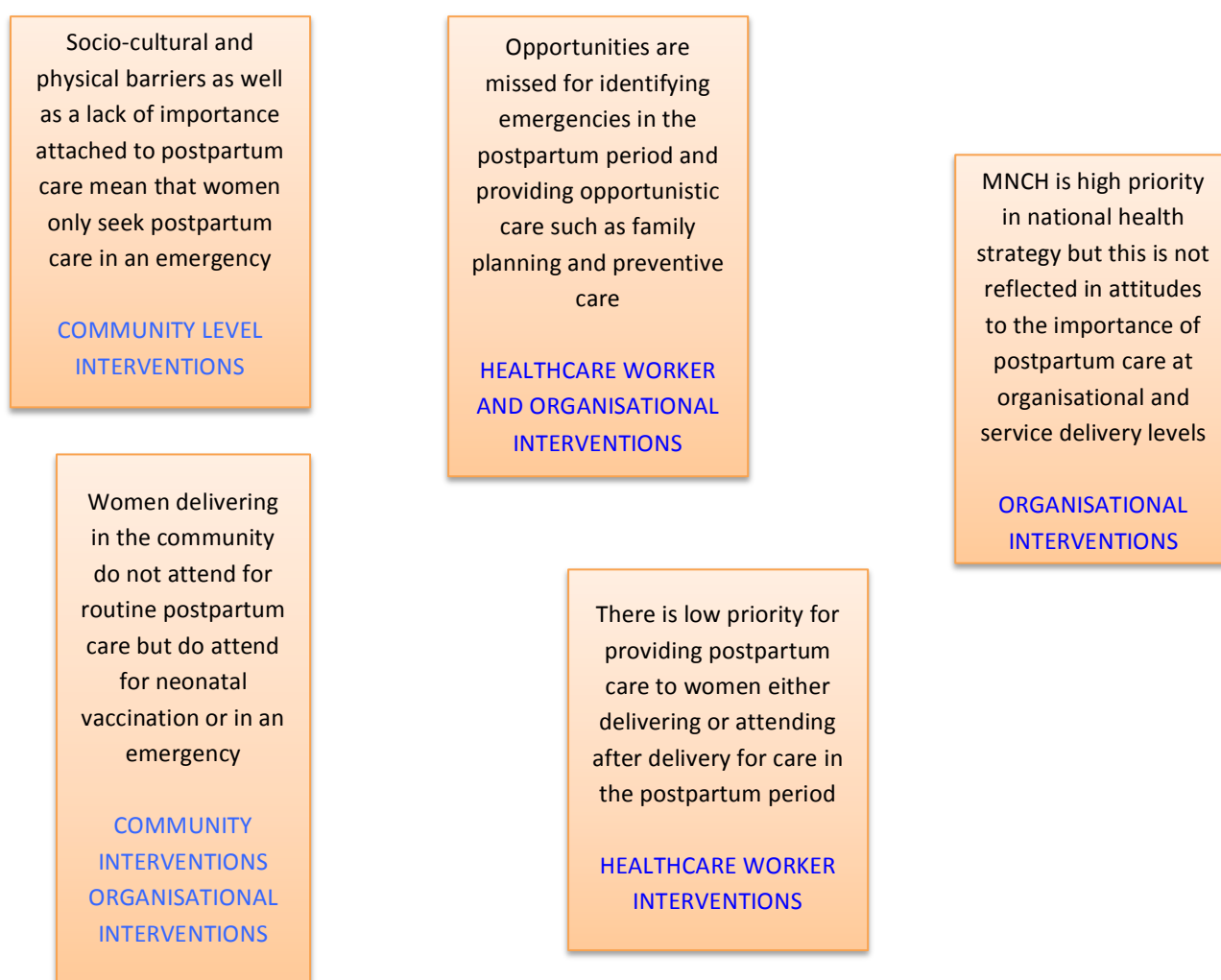


Figure 2 – Overview of baseline findings and intervention responses (WP 2 and 3)

The premise of the project was to engage the existing health system to bring about a transformation in uptake and delivery of postpartum care. MOMI was intended to act as a catalyst to the change by engaging the stakeholders and creating leverage through the policy advisory board (PAB). A package of interventions were designed and implemented to “kick-start” the programme of change. Key changes occurring in health systems were then observed and documented through on-going monitoring (WP 5) and the end evaluation (WP

6 and 7). The MOMI team facilitated the development of a package of interventions with key stakeholders from the respective health systems team (Duysburgh, Kerstens *et al.*, 2015). The features of the project that were defining and that underpinned all stages of this process are outlined in Figure 3. However implementation of the programme in each country was crucially dependant on the level of stakeholder engagement. The evaluation sought to make cross-site comparisons of both the implementation and the impact of the process to provide learning for future scale-up and spread of both the methodology and interventions themselves.



Figure 3 – Key features of the MOMI project

Intervention Aims:

The **demand side interventions** aimed to increase motivation and therefore demand by women for receiving postpartum care by raising the profile and importance of postpartum care and enhancing engagement of communities, as well as between communities and

health facility staff. Types of community level interventions varied across the intervention sites (Duysburgh, Kerstens *et al.*, 2015):

- Dialogue model of community development in Kenya
- Women's groups intervention in Malawi
- Educational meetings and PPC visits provided by CHWs to provide information and support to families in Burkina Faso and Mozambique

Health system strengthening and integrating models of service delivery to improve coverage and quality of postpartum care were the main **supply side interventions**. More specifically the following types of intervention that were implemented (Duysburgh, Kerstens *et al.*, 2015) were directed at different levels of the system – provider level, organisational and strategic:

- a) **Healthcare workers** training, supportive supervisions and non-financial incentives to expand the role of Health Facility Workers (HFWs) and CHWs in postpartum care delivery and improve motivation and capability for delivering care more frequently and to the highest standards.
- b) **Organisational** interventions to support continuum of care, increase immediate delivery of postpartum care and provide care during child health clinics.
- c) **Strategic** level Interventions to raise the profile and engagement of the local healthcare system in the delivery of postpartum care and support change in policies and procedures around postpartum care delivery. This included establishing policy advisory boards and engage senior leadership to influence the overall perceived priority of care in the postpartum period and developing a district level role in postpartum care provision.

The packages of interventions selected for delivery at each site are indicated in Table 1.

Table 1 – Broad areas of intervention focus for MOMI sites

Intervention Strategies	Burkina Faso	Kenya	Malawi	Mozambique
HEALTHCARE WORKER INTERVENTIONS (community and facility)				
Training on PPC management and danger signs	✓	✓	✓	✓
Supervision and mentorship	✓	✓	✓	✓
Use of supportive materials	✓	✓	✓	✓
CHW incentives	✓	×	×	×
COMMUNITY INTERVENTIONS				
Communications materials	✓	✓	×	✓
Educational meetings	✓	✓	✓	✓
Meetings with key community leaders	✓	×	✓	✓
Home visits to postpartum women	✓	✓	✓	✓
Men's and Women's groups	×	×	✓	×
ORGANISATIONAL INTERVENTIONS Integration of PPC with antenatal/child health clinics				
Restructuring roles	✓	×	×	✓
Restructuring patient circuit	✓	×	×	✓
Physical structure	✓	×	×	✓
Improved referral systems	✓	×	×	✓
Restructuring processes	×	✓	×	✓
STRATEGIC INTERVENTIONS				
Project advisory boards	✓	✓	✓	✓
Influencing district level policy	✓	✓	✓	✓

1.3 Evaluation Aims

Justification:

The evaluation aims to uncover how the interventions implemented resulted in increased uptake, frequency of delivery and quality of evidence based postpartum care and, in particular, what worked, for whom and within which contexts. Although the evaluation and sustainability elements of this programme were seen as separate entities and work packages (WP 6 and 7), we present a combined report about implementation, effectiveness and sustainability since it emerged as being more conceptually and methodologically meaningful to consider these elements together.

The nature of the interventions themselves and the contexts within which they were implemented were complex requiring an evaluation strategy (rather than a single research method) to reflect this. Rather than simply considering whether the design, delivery and implementation of the interventions and/or the interventions themselves “work” or not, we have taken a more nuanced approach that takes account of different contexts, and asks what works (or not), why, for whom and in what circumstances. In other words, the evaluation lays a greater emphasis on the intervention theory rather than the intervention itself. In this way the evaluation takes account of impacts the interventions are likely to have – both intended and unintended – as well as the ways in which institutional, political, economic and social contexts impact on the outcomes. The premise is that the observed outcomes are a result of the interaction of the intervention with all these different factors rather than the independent result of the intervention itself. This is most likely to create a better understanding of how and why the intervention has the observed effects and the particular adaptations needed for different contexts leading to recommendations that are relevant for policy and practice.

When the observed effects do not concur with the expected outcomes of an intervention, evaluation should also look into the implementation strength of the intervention and see if it was adequate to manifest the intervention mechanism in the presence of various contextual factors. Thus there were three main objectives to the evaluation (see box).

Evaluation Aims:

To determine whether implementation of tailored health system strengthening interventions in the postpartum period resulted in improved delivery of care in four African countries – Burkina Faso, Kenya, Malawi and Mozambique

To understand what worked for whom, how and in what circumstances in the design, implementation, delivery and sustainability of postpartum care

To draw comparisons between settings, to identify the implementation determinants that influenced delivery and uptake of postpartum care interventions

Chapter 2 – Evaluation Strategy

2.1 Evaluation frameworks

The evaluation is approached in three parts

- a) Modelling **impact evaluation**
- b) **Measurement of implementation strength** using the Consolidated Framework for Implementation Research (CFIR) framework
- c) Analysis of programme theory using **realist evaluation** approach

An overview of the evaluation strategy comprising the key evaluation components and the data sources used for analysing these components are presented in Figure 4. For the purposes of the evaluation, we begin by explaining the research strategy for the impact evaluation, followed by the analysis approach for measuring implementation strength and finally the theory based evaluation using a realist evaluation approach.

2.1.1 Impact Evaluation (Quantitative Evaluation) Framework

The MOMI interventions (Table 1; Appendix 1; Duysburgh, Kerstens *et al.*, 2015) were carried out in one district of each of the four countries. The overall aim of the MOMI intervention was to reduce maternal and infant mortality in the post-partum period up to one year after birth, and to improve rates of post-partum family planning (§1.2). A conceptual model theorising how the MOMI interventions would achieve these results through effects on intermediate outputs and outcomes, dependent on contextual factors and independent of potential confounders, was developed by the evaluation team in consultation with the programme management team (PMT) after the interventions were agreed, in 2013. This conceptual model was converted into a Directed Acyclical Graph (DAG), a method of building a statistical model to estimate unbiased causal intervention effects on the outcomes (Shrier & Platt, 2008) and is reproduced in Appendix 3. The data required for this model was intended to come from MOMI monitoring data (WP 5) and external sources including national Health Management Information Systems (HMIS), and Demographic and Health Surveys (DHS). As agreed during the annual MOMI PMT and Scientific Advisory Board (SAB) meetings sufficient data availability – especially for impact indicators at district level – for a sufficiently precise full impact evaluation model was likely to be a challenge. Therefore a qualitative realist investigation (§2.1.3, §2.4) was adopted as the main evaluation metho-

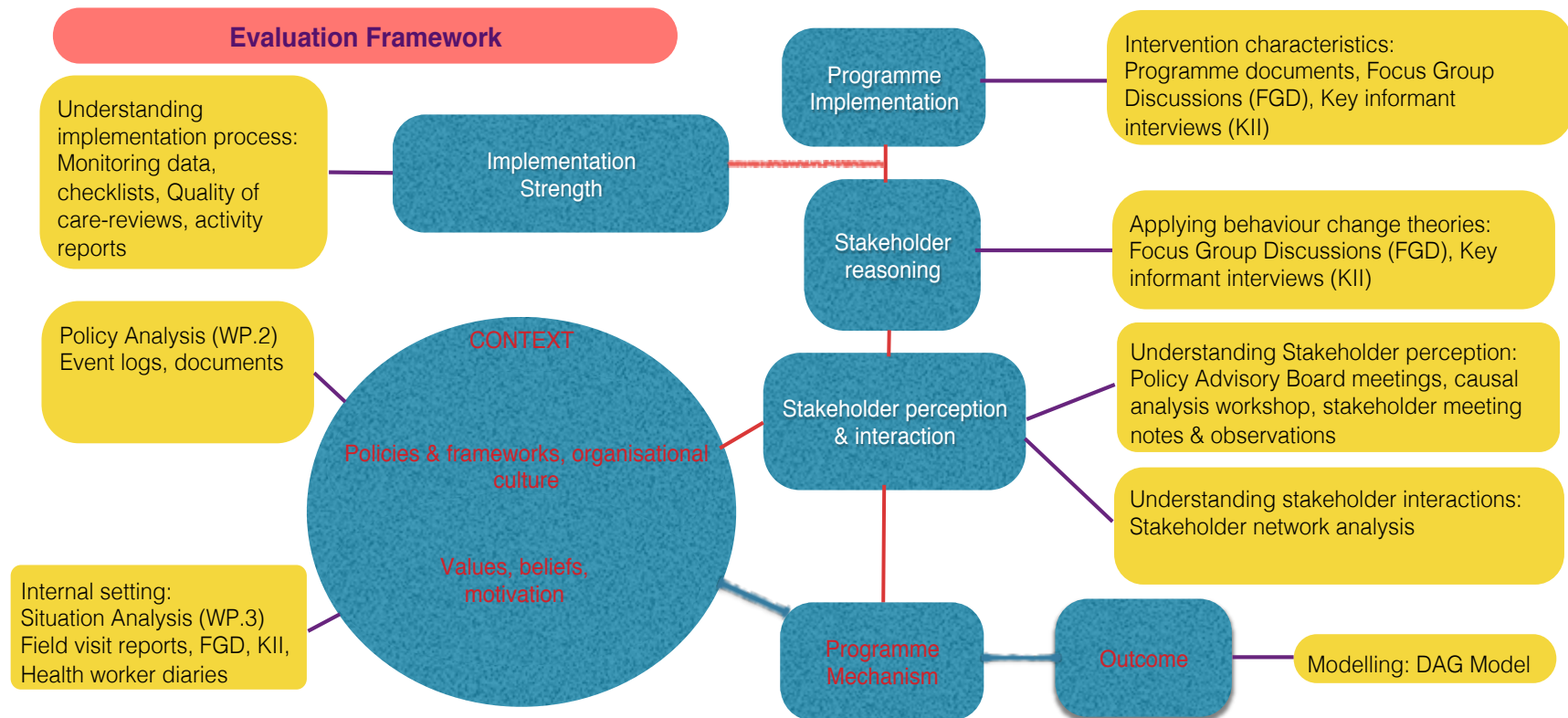
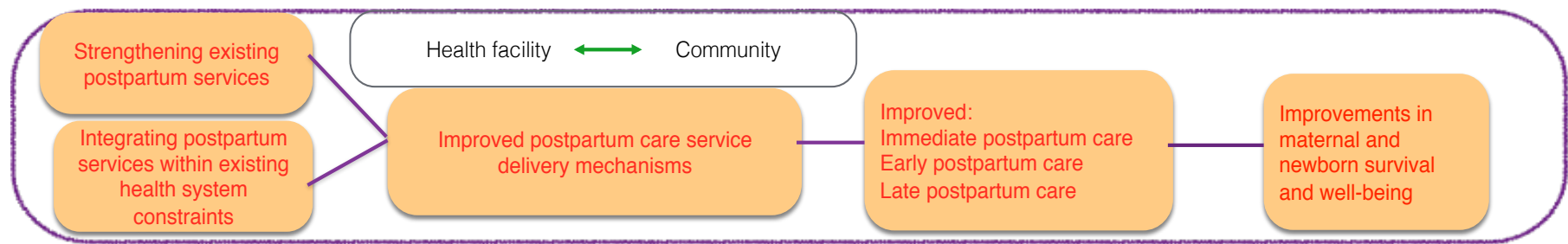


Figure 4 – MOMI Evaluation Framework

dology and a step-by-step approach to the quantitative evaluation was pre-specified, as follows. Please note Steps A. and B. are based on temporal sequences of events and thus relate to the plausibility rather than probability (Habicht *et al.*, 1999) of the MOMI interventions having effects on the indicators measured.

- A. *Descriptive Analysis I - Patterns.* For each country, we plotted each of the monitoring indicators (see Figures in Chapters 3 to 6 and in Appendix 7) as a monthly time series and overlaid with all key events from the relevant intervention timeline (Appendix 2). Changes in the indicators with respect to intervention implementation were assessed visually.
- B. *Descriptive Analysis II – Case Studies.* Same As A., but analysis included each facility in each country. The trends in the indicators were visually explored with reference to information from the qualitative realist evaluation in the four case study facilities in each country to compare, contrast and triangulate the findings between the two methods. The plan was that if both A. and B. indicated that the MOMI interventions were unlikely to have had any significant effects (e.g. by there not being any clear changes in the trends of the indicators after key intervention implementation events) then the value of conducting C., D. and E. below would be reassessed. D. and E. could potentially be used to investigate any specific local patterns hinting at significant effects for individual indicators.
- C. *Regression Modelling I – Full model.* This starts with the conceptual DAG model (Appendix 3) of the MOMI interventions, contextual factors, outputs, outcomes and impact, and is refined for each country based on actual final implemented interventions and discussion with MOMI country teams. Pathways are defined with monitoring data and data from HMIS, DHS and other literature, using rough priors from the literature where there is insufficient data. This is followed by verifying and triangulating the parameterisation of the different pathways in the DAG with data from the qualitative realist evaluation. The next step is to reduce the DAG to a causal model using the steps outlined in (Shrier & Platt, 2008) via DAGitty software (Textor *et al.*, 2011), as detailed in Appendix 3. Then, given the uncontrolled nature of the study and the organisation of the data on intervention implementation and outcomes by time (month), a time-series regression of the data from the reduced DAG could be conducted to assess the impact

of the interventions on the outcomes. Given likely large uncertainty and missing data (insufficient data) a Bayesian approach could be adopted to borrow strength from rough priors informed by literature and expert opinion in the absence of data.

- D. *Regression Modelling II – Case Studies*. If C. proves too difficult or impossible due to its complexities, we could focus on smaller groupings of pathways stemming from each intervention or sub-intervention, in each country or just within specific locations of the country, as ‘case-studies’, and verify and triangulate these with qualitative data from the in-depth observational case-studies from the realist evaluation (§2.1.3, §2.4).
- E. *Cross-Site Analysis*. Map similar pathways from each site and combine in a meta-model based on C. or D.

The methodology section below provides specific details of what was done, and provides in depth information on the data, data sources and methods used.

2.1.2 Evaluating Implementation Strength

An intervention begins with a set of activities including intervention design, implementation strategies, assumptions and risks, which form an integral part of its implementation framework. Once an intervention is implemented with the appropriate implementation strength, it stimulates a change in thinking or behaviour of the agent(s) (i.e. the individual and collective reasoning of all key stakeholders involved in the project), that is in the appropriate context, the ‘mechanism’ by which the intervention leads to the impact is triggered. From an evaluation perspective, this is a key point differentiating complex interventions from clinical trials. Thus, a good understanding of implementation theory is important in order to understand a realist evaluation.

Measurement of implementation strength consists of two main components namely implementation quality (also referred to as fidelity or integrity) and quantity (also referred to as dosage). Fidelity is defined as *the extent to which delivery of an intervention adheres to the protocol, guidelines or programme model originally developed* while the ‘dosage’ of an intervention refers to the dose, duration, intensity and specificity (Schellenberg *et al.*, 2012). Implementation strength can be measured by assigning subjective scores for each individual component. Ideally, this would be through a consensus building exercise by key people

involved in project implementation and evaluation. However, there is no consensus in literature on defining or measuring implementation strength (Schellenberg *et al.*, 2012).

Measuring implementation strength tells only part of the story. While implementation effort is significantly associated with changes in activities (or outputs) related to the intervention, the implementation strength need not necessarily influence the outcome measures. Here, the intervention's interaction with the context to 'trigger' the mechanism is important to attribute implementation strength to changes in outcome. One of the challenges with complex social interventions is that it is difficult to determine what implementation threshold is needed to 'trigger' the mechanism and thereby achieve change in outcomes.

Our evaluation strategy therefore, was to understand and explain the relationship between the essential implementation components and key contextual factors, rather than quantifying implementation strength per se. The contextual factors (see also programme theory) included both the broader health systems context as well as the inner (organisational) settings of implementing partners. The implementation components mainly included the implementation strength but also key intervention and agency characteristics such as stakeholder engagement and health care provider-community relationship, respectively.

A common parlance in realist literature is the use of term 'resources' and 'reasoning' to explain the interaction between context and mechanisms. 'Resources' is analogous to implementation strength of an intervention.

2.1.3 Realist Evaluation Framework

We undertook a realist evaluation (Pawson & Tilley, 1997) so as to enable a more nuanced understanding of the influence of different contextual factors on both the implementation and impacts of the interventions. Scientific realism takes an ontological perspective that presupposes the existence of some objective reality, albeit one that is context dependent rather than directly observable (Pawson, 2013). It seeks to understand this context and its influence on whether and how an intervention will work. It assumes that interventions being implemented provide a set of "resources" into a system – in this case a set of context specific interventions such as training of healthcare workers, organisational integration of postpartum care into vaccination clinics or checklists as prompts for healthcare workers, and a process for engaging stakeholders through policy advisory boards. These resources can be considered as a product of the interventions themselves and the

strength of their implementation (see 2.1.2) and assumes that the implementation strength must achieve a crucial threshold in order to trigger reasoning by the individuals functioning both within and outside the system (Mechanisms, M) to deliver outcomes (O). The reasoning of an individual is not only dependent on the resources they are supplied with but is also influenced (facilitated or constrained) by the particular circumstances, within which they work and the overarching broader societal context (C). This results in a varied pattern of impacts (O) of any intervention (Pawson, 2006). Stakeholders are constrained by their context in the choices that they make in response to resources and the impact of the intervention is therefore contingent on whether the mechanisms may or may not be triggered to produce the desired outcomes. A realist evaluation aims to tease out these interdependencies by understanding how and why and under what circumstances an intervention is likely to work.

The first stages of the evaluation involved theorising about how the interventions might or might not work by identifying context (C), mechanism (M) and outcome (O) configurations. The theoretical propositions were shaped by five periods of data collection during the MOMI project – the baseline policy analysis (WP 2), the situation analysis (WP 3), the causal analysis workshop (WP 9), the development of interventions (WP 4) and the formative evaluation data collected earlier in the phase of intervention implementation – and seek to unpack how interventions are presumed to exert an effect. Substantive theories: Pawson’s theory of health system change (Pawson *et al.*, 2014) and the Behaviour Change Wheel (Michie *et al.*, 2011), were also used as a framework for understanding the human response to the interventions at all levels of the system. Subsequent data collection using case study methodology, enabled the theories to be refined to develop a final programme theory about what works for whom and how in the delivery of postpartum care interventions.

The next few sections provide a detailed description of the evaluation process.

2.2 Quantitative Evaluation Methodology

Descriptive Analysis I – Patterns

In each country the MOMI team collected the monitoring data from the health facility antenatal, delivery, post-natal and out-patient registers and from community health workers’

records for the community indicators as appropriate and as described in the WP5 monitoring report (Kouanda, 2013). This data was entered into Microsoft Excel spreadsheets by MOMI country researchers and checked for inconsistencies (e.g. larger numerators than denominators for an indicator or data that did not have face validity or did not tally with other data from the same or other facilities in the country) by TC and the UCL evaluation team. TC then imported the data into Stata 13.1 for Mac (Statacorp, 2013) to further check and clean the data as necessary and produce run charts of each indicator, grouped by theme or intervention area as appropriate for descriptive analysis. Indicators were calculated as proportions of women or proportions of babies, and numbers of women or babies with the numerator of interest (e.g. protocol or checklist followed, morbidity or death recorded, family planning used) were added to the bars as appropriate. The intervention timelines were added to these run charts with events occurring in a given month numbered on the graph and detailed as footnotes.

Visual analysis was initially conducted relating the occurrence of particular events concerning MOMI intervention implementation and supervision, to observed trends of relevant indicators on the graphs. Other information on relevant contextual factors or non-MOMI interventions was also sought from MOMI teams to aid the interpretation of this initial analysis which aimed to assess the plausibility (Habicht *et al.*, 1999) of the MOMI interventions effecting the given indicators. The results of the visual inspections of the trends in each indicator were coded as one of the following mutually exclusive categories:

- i) *Positive association with MOMI*: Indicator shows improvement (up for a positive outcome such as use of postpartum family planning, or down for a negative outcome such as sepsis) after a MOMI intervention is implemented.
- ii) *Positive association with external factor*: Indicator shows improvement after a non-MOMI intervention, but not after a MOMI intervention is implemented.
- iii) *Positive association with MOMI and external factor*: Indicator shows improvement after a MOMI intervention and a non-MOMI intervention are implemented.

- iv) *Positive association with unknown factor:* Indicator shows improvement, unlinked to MOMI or any known external factor.
- v) *No or negative association:* Indicator stays the same or gets worse (down for a positive outcome such as use of postpartum family planning, or up for a negative outcome such as sepsis) after MOMI intervention implemented.
- vi) *Insufficient data:* too few events recorded of the intervention of interest to determine a trend or assess any association with MOMI or other interventions.

Descriptive Analysis II –Case Studies

The next stage of the analysis involved producing graphs of the trends in indicators by month for each of the facilities in each country using the same method as described above. In addition to visually relating the trends observed for each facility in these graphs with the intervention timelines, we also compared and contrasted the trends with the findings from the realist evaluation case studies, as follows. The realist evaluation case studies were conducted in four facilities in each country and involved interviews with health workers in the facilities and communities and women who used the facilities for antenatal, delivery and postpartum care (§2.4). The themes emerging from the realist evaluation were used to develop programme theories. These programme theories were then compared to the quantitative data in the relevant facilities to determine if the programme theory was plausible given the data, and also to determine if the data was plausible given the programme theory. The quantitative data and the programme theories were analysed separately initially, so as to avoid any kind of bias.

2.3 Evaluating implementation strength

As described (section 2.1.2), a key feature of measuring the effect of an intervention is measuring its implementation strength. The steps for measuring include identifying essential components to be measured, grouping components into domains, building a measurement instrument, piloting the instrument and finalising the instruments. It can be measured by calculating scores for individual indicators and their domains, averaging domain scores or by weighting the components. Despite progress in recent years in measuring implementation

strength, there is no consensus on defining or measuring implementation strength (LSHTM, 2012).

For the purposes of MOMI evaluation, the key domains considered were the dose, duration, intensity, specificity and fidelity of the intervention in each of the four sites (Summerfelt, 2003). Under each domain, a range of constructs were developed such as number of trainings and refresher trainings conducted (dose domain), number of supervision and mentorship visits conducted against the plan and whether feedback was provided or not (intensity domain). The specificity domain was based on the conceptual clarity that was provided for the key intervention activities. Fidelity was defined as the extent to which delivery of an intervention adheres to the protocol, guidelines, programme or treatment model originally developed. It captures the difference between the intervention activities that were planned against the activities that were actually conducted in the study sites. However, for complex interventions such as MOMI, it is likely that the intervention will deviate from the protocol and this is in fact a good thing since this indicates that the intervention is adjusting to the context. So in order to measure fidelity in these cases, it is better to measure adherence to the principle (function) behind the protocol rather than adherence to the protocol itself. Each of the domains was rated on a scale of 1-5. The rationale for the rating used in the scale is described in Table 2. These ratings would ideally be developed through consensus between implementing and research partners. However, in MOMI the scores were developed based on researcher perception of project implementation.

For the implementation dosage, a score of 1 indicates none of the planned activities were completed while a score of 5 indicates that 100% of the planned activities were completed. Duration of the intervention had a score of 1 if only preliminary work was completed while a score of 5 means that the interventions were implemented for more than a period of 24 months. The intensity of the intervention was rated according to the amount of supervision, coaching and mentorship provided. Ideally, we would want to measure the quality of the supervision but this data was not available for all the sites. A score of 4 and above meant that feedback formed part of the supervision activity. Specificity referred to conceptual clarity regarding the intervention. A score of 1 indicated a lack of understanding of programme concepts and principles while a score of 5 indicated a clear understanding of programme concepts and principles. Fidelity was measured in terms of adherence of the

activities to programme objectives. Interventions where the activities could be linked to the objectives and were implemented as planned had a score of 5 while intervention activities that were completely different from the original plan and could not achieve the objective of the intervention scored a 1.

	1	2	3	4	5
Dose (Refers to training/refreshers)	No planned activities completed	About 25% of the planned activities were completed	Nearly 50% of the planned activities were completed	Nearly 75% of the planned activities were completed	100% of the planned activities were completed
Duration (Period of actual intervention)	Only preliminary work done	< 12 months	12-18 months	19-24 months	> 24 months
Intensity (Refers to supervision/ coaching/ mentorship)	No supervision, training or mentorship conducted	Supervision/ training/ mentorship irregular/sporadic.	Supervision, training and mentorship satisfactory	No feedback provided	Supervision, training and mentorship done regularly. Feedback provided. Follow up done.
Specificity (Conceptual clarity)	Lack of understanding of programme concepts and principles	Poor understanding of programme concepts and principles	There is some understanding of programme concepts and principles	There is good understanding of programme concepts and principles	Clear understanding of programme concepts and principles
Fidelity (Adherence to programme objectives)	Intervention activities completely different from original plan. Objectives not achieved through intervention.	Intervention activities very different from original plan. Objectives not achieved through intervention.	Intervention activities moderately different from objectives. Objectives could potentially be achieved.	Intervention activities slightly different from objectives. Objectives achieved through intervention.	Intervention activities directly linked to objectives. Objective achieved through intervention.

Table 2 – Implementation strength measurement scores

Having developed a score for each of the domains for each country site, we provide a brief explanation of how the scores were arrived at. Data for this process was collated from the available project documents. This included:

- The Gantt Charts outlining the detailed implementation plan
- Summary report of the detailed activity plan
- Summary report of the intervention timelines and activities developed towards the end of the project
- Field visits reports
- Country presentations and meeting minutes from the final PMT meeting.

The data was then presented visually as a spider-web diagram where each arm represents the key domain and the shaded area inside represents the ‘implementation strength’ of each individual intervention site.

2.4 Realist Evaluation Methodology

2.4.1 Explaining Programme Theory using a Realist approach

An initial programme theory was constructed to describe how MOMI, in its most generic form, is intended to work (Figure 5).

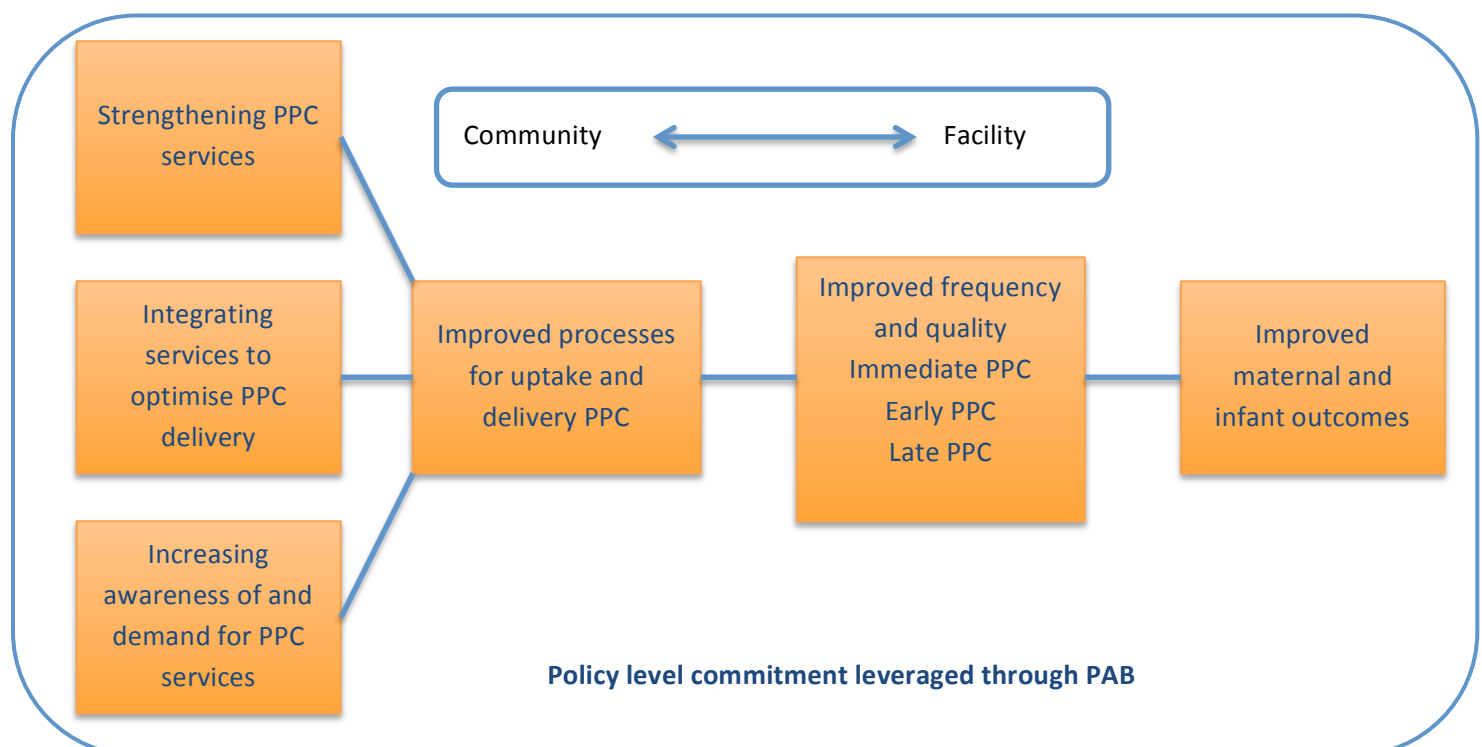


Figure 5 – MOMI Basic Programme Theory

Postpartum care refers to care of the mother-infant dyad from the period immediately after the birth of the baby, traditionally up to six weeks (42 days) after birth but up to 1 year post delivery for the purposes of the MOMI project. Provision of care in the postpartum period is divided into immediate, early and late neonatal period and can extend up to 9 months in the postpartum period. However, the evidence-base regarding the timing and frequency of postnatal visits is very thin. The current practice is to provide immediate postpartum care within 48 hours of childbirth. The package of recommended evidence-based interventions include treating maternal and infant morbidity and providing preventive care and advice such as family planning advice and infant feeding to optimise the health of the woman and infant after delivery (WHO, 2013). Women and families are expected to receive clear and specific key information and instructions on home care for themselves and their babies with special attention to breastfeeding and early identification of danger signs. The availability, cadre and competency of healthcare providers for providing postpartum care vary depending on the structure of the health system. Community support after discharge from a facility is important, as is collaboration between health services and communities especially in low resource settings. However, this is a weak link in existing postpartum services.

We considered intervention implementation strength prior to basing our impact evaluation on only the interventions that had been fully implemented. Initially we developed a rough programme theory (based on realist principles) for each implementation site to explain the impacts of the programmes in the different countries. A synthesis of findings from the WP 2 policy analysis (Mann, 2013), the WP 3 situation analysis (Barros & Lopes, 2013) and baseline data collection for WP 6 and 7 as well as discussion with key informants were used to develop the rough programme theory, represented by CMO configurations, for testing through the evaluation (Appendix 4). The empirical findings were integrated with substantive theory including the COM-B model of behaviour change developed by Michie *et al.* (2011) to inform programme mechanisms, and the Consolidated Framework for Implementation Research (Damschroder *et al.*, 2009) to understand the contextual factors likely to influence the intervention were considered. The initial proposed “realist” theories for the evaluation propose how the interventions themselves are thought to work so that the empirical data could be used to test and refine these theories through analysis. The data collection strategy – case study methodology, data collection tools and analysis frameworks – were specifically designed to test and refine the theory, leading to a final explanatory framework about how, for whom and under what circumstances the intervention works in

each country. These initial “rough” programme theories (CMO configurations) were developed by the evaluation team based upon what has been understood about the programme from previous rounds of data collection and in consultation with the all members of the MOMI team at the different sites (Appendix 4).

2.4.2 Data Collection

Methods and tools used to describe the initial programme theory has been described in details elsewhere (WP 2, 3, 4). The data collection strategies discussed here, were designed to measure implementation strength and test the programme theory described above using a realist evaluation approach.

A. Case Studies

An embedded multiple-case study design was the primary method used to test out, refine and generalise the programme theory. However other methods were used to supplement this data and allow for triangulation and theory testing. The method was selected for its ability to provide a real-life, in-depth and multi-faceted picture of a complex intervention in its natural context. Case studies are particularly useful in understanding the internal dynamics of organisations.

The case study aimed to capture 'how', 'what' and 'why' questions, such as '*how are the post-partum interventions being implemented and received on the ground?*' '*Which interventions can be implemented effectively and under which circumstances?*' In this way, the gaps in delivery could be highlighted, and a picture of why interventions worked better in a particular context leading to generative explanations through the explication of the mechanisms and contexts that are more or less important in underpinning the success or failure of the intervention. This enabled us to make analytic generalisations at a conceptual level for each study country and draw comparisons across sites to determine which factors are country-specific and which are common between settings.

The method was selected not only because it was the preferred method for answering the study questions but also because learning from the MOMI project has demonstrated that short intense periods of data collection are often more effective than those requiring sustained inputs.

B. Case Definition

A case for the purposes of this study will be defined as a two-week period within the selected health facility, and its surrounding community – including the CHWs and members of the local community who are served by that facility and the MOMI community level interventions supported by that facility (see Figure 6). Case studies and constituent members were carefully defined. The local referral facility and district management team (common across all four cases) were also studied as an adjunct to each case allowing pathways of care and how these facilitate or hinder implementation of the interventions to be understood. Data collected earlier (WP 2 and 3) about the national and political context and its influences on implementation was also incorporated into the analysis of external context.

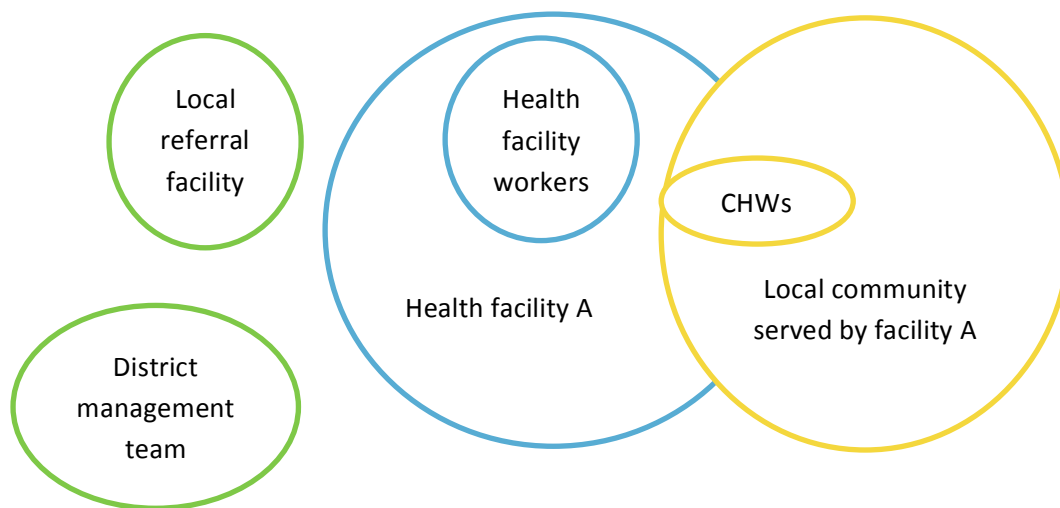


Figure 6 – Diagrammatic representation of "the case A"

The case definition was intended to be flexible so that the boundaries could be adapted to discoveries during the data collection, if further purposive sampling was needed to supplement the information generated. It was a multiple-case embedded design and there were four "cases" in each study country. This number was felt to adequately capture the full range of case characteristics in terms of size, location and implementation strength.

C. Selection of Case Studies Sites

The MOMI researchers in each country guided the purposive selection of four contrasting “cases” from their study areas guided by a framework in which they scored each case on the basis of a range of different characteristics. Sites were purposively selected in each country to maximise geographical variation and also to include two sites with low implementation effectiveness and two with high, based on the knowledge of the MOMI researchers within each team.

Table 3 – Characteristics of selected cases

	Case 1	Case 2	Case 3	Case 4
Burkina Faso	Low	High	High	Low
	Implementation	Implementation	Implementation	Implementation
	Rural Setting	Rural Setting	Urban Setting	Urban Setting
Kenya	High	High	Low	Low
	Implementation	Implementation	Implementation	Implementation
	Rural Setting	Rural Setting	Urban Setting	Rural Setting
Malawi	High	Low	Low	High
	Implementation	Implementation	Implementation	Implementation
	Urban Setting	Urban Setting	Rural Setting	Rural Setting
Mozambique	Low	High	Low	High
	Implementation	Implementation	Implementation	Implementation
	Rural Setting	Rural Setting	Rural Setting	Rural Setting

Local MOMI teams initially made contact with the particular cases to secure trust and buy-in from participating sites since this was deemed an important aspect of successful data collection. The tension between time and resources constraints and quest for data that is minimally influenced by presence of a researcher was acknowledged. Researchers oriented themselves with the sites in advance of the data collection period and were encouraged in a continuous process of reflexivity so that they were able to critically evaluate the impact of their presence on both data collection and its interpretation.

D. Ethical Considerations

Ethical approval for all new elements of data collection was re-sought and gained within the study countries.

In Burkina Faso, ethical approval was obtained from the Ethics Committee for Research in Health of Burkina Faso under the deliberation number: 2015-5-074.

In Kenya, ethical approval was obtained from the University of Nairobi/Kenyatta National Hospital ethical review committee under protocol number: P151/03/2014.

In Malawi, ethical approval was obtained from the National Health Research Council of Malawi under protocol number: NHSRC # 1061:10/2015.

In Mozambique, ethical approval was obtained from the Comité Nacional de Bioética para a Saúde (CNBS – National Health Bioethics Council), with reference number 116/CNBS/2015.

Written informed consent was obtained from all participants interviewed for the end-evaluation.

Several measures were taken to ensure that the participants' identities remained confidential through a protocol set out during the training workshop in Mombasa with all field researchers. Such measures included that interviews were conducted in an area chosen by the participant; all personal identifiers in the interview transcripts were removed by the field researchers; that the data was kept on a password protected computer and shared only with researchers involved in the data analysis.

E. Pilot and Preparatory Work

An initial pilot study was conducted within a “case” that would not be used for the final evaluation, except for Mozambique where MOMI was implemented only in 4 health facilities. The purpose of the pilot was to identify and address the practical barriers to conducting the full case study and to provide the basis for training of data collectors before this started. Training was provided to all MOMI researchers in order that the evaluation strategy and aims were understood and that the data collection would be optimised. The training also provided an opportunity for the local teams who were closer to the interventions to refine the data collection tools and input into the programme theories.

As a follow up to the research training, data collection templates and guidance were provided to the teams throughout the period of data collection. This was initially provided through face-to-face mentoring with follow up by regular Skype meetings by the UCL evaluation team.

F. Data Collection for Case Studies

The data sources for the case studies primarily involved direct observations and interviews with key personnel across different levels of the health system.

Observations:

Observations in each site took place for between one and two weeks by either one of two MOMI researchers. Researchers had a daily presence in the health facility and community with the aim of them becoming part of the accepted environment. The researchers observed care in both the health facility and community and also shadowed healthcare workers that were employed at the health facility. They aimed to observe the full range of postpartum care including routine and emergency immediate care, routine PPC visit at 48 hours, a family planning consultation and a neonatal vaccination consultation. A structured recording template was developed for completion to record their observations (Appendix 5) transferred from the daily field notes. The template functioned as an aid to ensure the main issues were covered whilst remaining open to pursuit of the unexpected during observations. Researchers were trained and encouraged to follow their own lines of enquiry and expand understanding of the processes that are in place and to reflect on what they observe through diary entries written at the end of each day. Observations were divided between community and health facility. The importance of tracking pathways of care was stressed so that observations would include transport and further stages in the management of care, where relevant.

Interviews:

Semi-structured interviews for each case were conducted with HFWs, CHWs and district and policy advisers as well as the women themselves. These were in addition to the informal conversations recorded as part of the observations template. Generic topic guides were provided for each participant category (Appendix 6). These were modified in consultation with the individual countries to reflect the particular interventions that had been

implemented. All researchers were trained in semi-structured interviewing techniques specific to the requirements of the evaluation and with a mind to eliciting the data that would be required to test the initial programme theories.

As many of the clinical staff as possible at the health facilities were interviewed with the aim of interviewing a minimum of two per facility. In addition, a minimum of two community health workers assigned to each facility and a minimum of three women postpartum, one who had delivered in the facility, one who had delivered at home and one who was attending for infant vaccination were also interviewed. The numbers of interviewees (Table 4) selected aimed to sample with maximum diversity whilst minimising the number to what was feasible in terms of research capacity.

In addition to the case study interviews, key members of the MOMI teams who had been instrumental throughout the period of implementation were interviewed to track the process of implementation and identify barriers and facilitators along the way. Key stakeholders at district level and above such as the District Medical Officer, district MNCH nurse, trainers, lead for supervision visits etc. were also interviewed.

Table 4 – Interview participants in the end-evaluation

INTERVIEW PARTICIPANTS	Postpartum women	CHWs	HFWs	Policymakers	MOMI staff
Burkina Faso	13	13	16	4	3
Kenya	15	12	7	2	4
Malawi	12	8	12	6	3
Mozambique	12	7	11	6	5

Prior to interview, participants were each provided with the study information, invited to participate and if in agreement requested to sign a consent form. At interview, each participant was asked a series of closed questions followed by open questions to explore the CMO realist explanatory theories for the postpartum interventions. One to two identified researchers conducted all interviews according to the structured topic guide (Appendix 6).

G. Supplementary Data Sources

The primary data collection was supported by analysis of data from previous work packages. Data sources used are summarised in the table below.

Table 5 – Supplementary data sources for the end-evaluation

Data Source	Data Collection Period
Work Package 2 “Critical review of Maternal, Newborn and Child Health Policies in the four study countries”	Up to January 2013
Work Package 3 “Detailed situation analysis of Maternal, Newborn and Child Health Services and Care at the four study sites”	Up February 2013
Work Package 4 “Design optimum package of postpartum interventions and services tailored to conditions at each site - Selected Package of Interventions for Each MOMI Study Site”	Up to July 2013
Participatory Evaluation Workshop minutes	September 2015 & November 2015
Project Management Team meetings minutes	From February 2011 to September 2014
Policy Advisory Board meetings minutes	From September 2013 to August 2015
Field visit reports at the four study sites	From October 2013 to August 2015
Health Facility Event Logs at the four study sites	From July 2013 to June 2015
MOMI Event Logs at the four study sites	From July 2013 to June 2015

H. Translation and Transcription

All interviews were recorded and transcribed verbatim by the researchers in-country. Transcription and translation of interviews and translation of observations (where needed) were also conducted in-country and the final transcripts prepared for analysis, led by a single English-speaking researcher from UCL.

I. Quality Assurance and Iterative Methodology

Following training of the data collectors, introduction of the study tools and the pilot data collection period, on-going support was provided to the country research teams through a one to one system of mentoring throughout the period of data collection. Each site was shadowed for at least one case study by the UCL researcher. After this, there were

weekly Skype meetings and feedback discussions about emerging data enabling continued quality assurance and refinement of the data collection techniques. This required transcription and translation of the first case study data for quality check, before proceeding to the next. This also allowed iterative development of the topic guides in relation to emergent themes to also be addressed.

2.5 Qualitative Data Analysis

A list of realist programme theories (see Appendix 4), represented by CMO configurations, were developed by SM in consultation with other members of the research team based on the findings of previous work packages, individual country reports, baseline study and pilot end-evaluation. Those programme theories were then tested in each country setting through thematic qualitative analysis.

Codes were developed by ND, tested on a small sample of interviews (including interviews with women, HFWs and CHWs) and checked by SM, PM and DM. Data was coded, when applicable, based on realist terms: Context, Resource, Reasoning and Outcomes. Simultaneously, coded data was grouped with main themes identified in the programme theories to be tested (e.g. motivations of CHWs, access to the HF, gender roles, organisation of the HF, etc.) and/or, if applicable, with determinants of sustainability and replicability (detailed in chapter 8). Data was analysed using NVivo 11 qualitative analysis software. All sources of qualitative data were analysed according to these codes by the UCL and FMUP evaluation teams and memos recording emerging themes were shared between the evaluation team. Findings were discussed and triangulated in weekly Skype meetings with UCL and FMUP. Additionally, the analysis was conducted in very close consultation with the research teams in-country who collected the data to cross-check interpretations and emerging findings. Interviews with the MOMI researchers that were significantly involved in implementation were conducted during data analysis by the UCL and FMUP researchers to get their perspective on implementation processes but also confront the themes identified in case studies and refine the programme theories.

After data analysis, the UCL evaluation team discussed common and emergent themes from the country-specific results and put forward 4 middle-range theories. These middle range theories were then presented and tested with the rest of the MOMI consortium

during the final programme management team (PMT) meeting and with stakeholders during the MOMI dissemination conference (January 2016, Mombasa – Kenya).

The figure below summarises the steps taken to develop and refine the programme theories during the evaluation process.

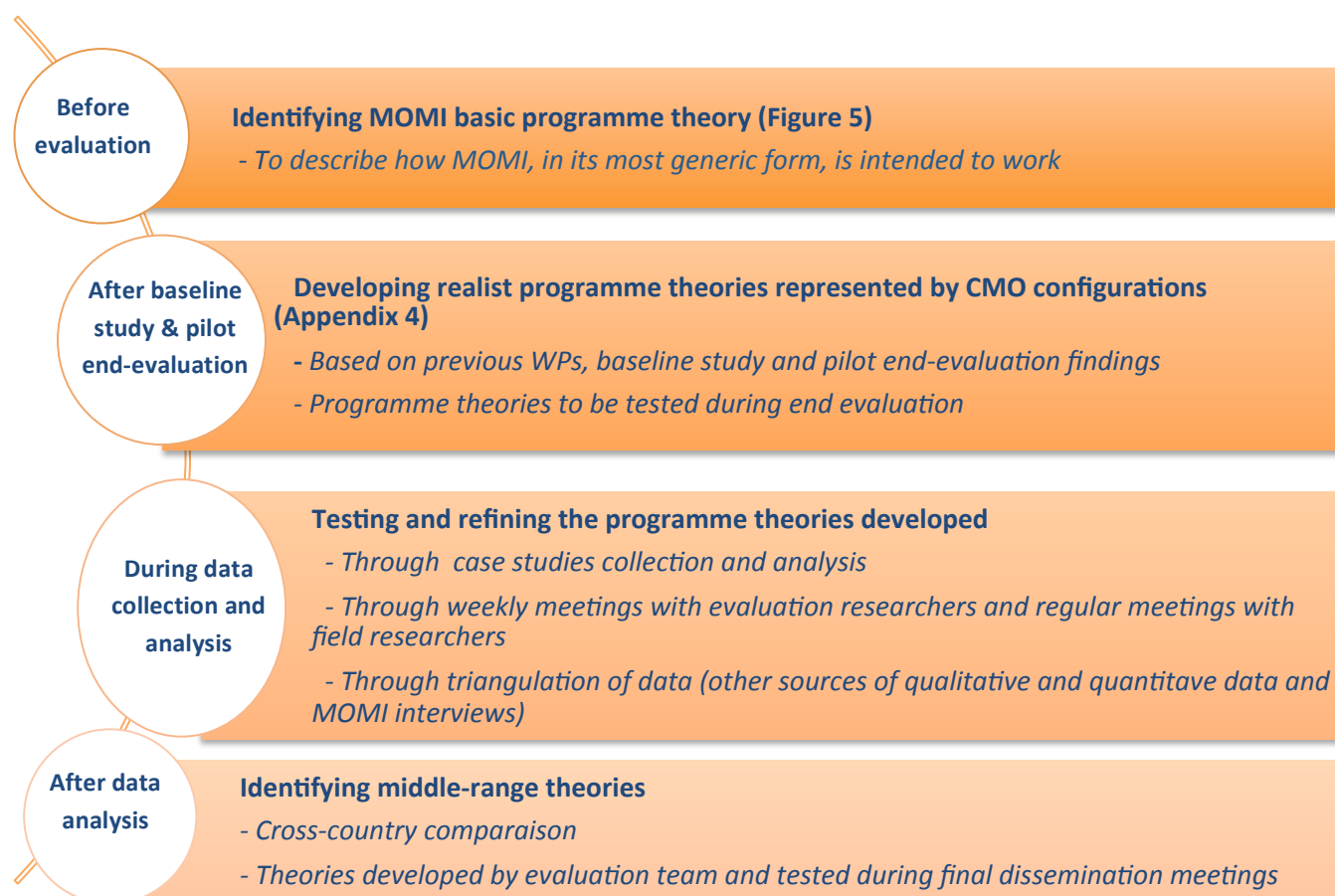


Figure 7 – Data analysis process for MOMI end-evaluation

Chapter 3 – Kaya district, Burkina Faso

3.1 Interventions Implemented in Kaya District

In Kaya district, three interventions were chosen and implemented across 12 health facilities (HFs) and 72 communities:

- Intervention 1: Enhance the delivery of immediate postpartum care in health facilities with focus on the detection and management of postpartum haemorrhage and sepsis
- Intervention 2: Integration of maternal and infant services in the postpartum period
- Intervention 3: Traditional birth attendants (TBAs) in the community support mother and infant during the postpartum period.

Interventions 1 and 2 focused on improving the delivery of PPC by training HFWs on PPC management and provision, as well as service integration. Yearly refresher trainings were conducted to deal with the high staff turnover. HFWs were additionally provided with PPC guidelines and checklists to support PPC consultations at the HF. To assist the HFWs, MOMI IRSS conducted quarterly supervision visits. Furthermore, HFWs were given overcoats as a non-financial incentive to implement the PPC activities.

In Kaya, intervention 3 was conducted by TBAs, referred to as *Accoucheuses Villageoises* (AVs). 72 AVs (1 per community) received training and quarterly supervisions by MOMI IRSS in order to provide PPC health education to women in the community during home visits and community events. The aim of these talks was to refer women (in person or via referral tickets) to the HF in case of complications and for PPC visits scheduled 6 days, 42 days and 9 months after delivery. AVs were equipped with pictorial guides to assist them in their health talks. To motivate the AVs, non-financial incentives were distributed: bikes, bags and overcoats with the MOMI logo. Detailed timelines of the three interventions can be found in Appendix 2.

3.2 General Context of Implementation

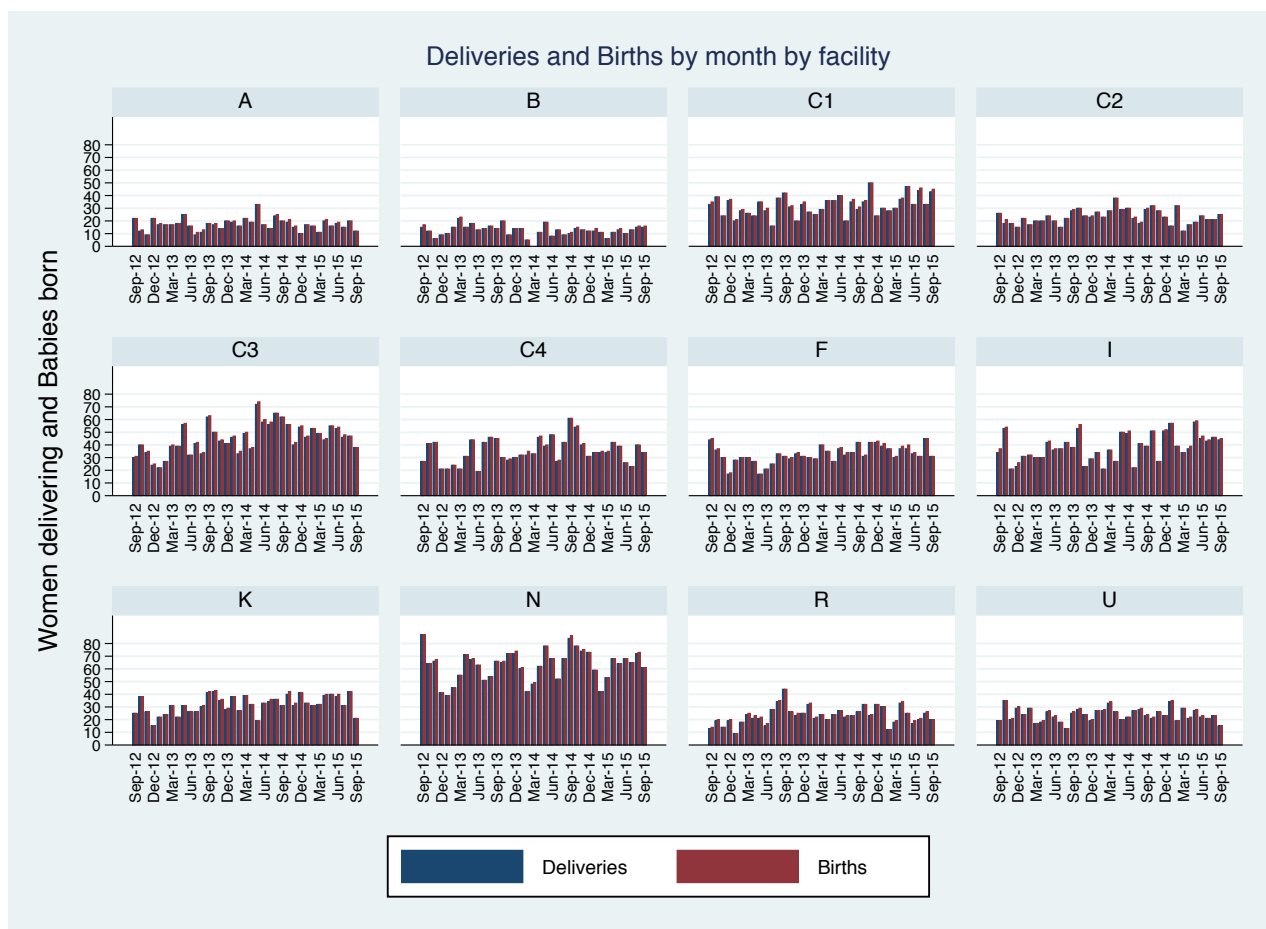
Baselines studies conducted by the MOMI consortium gave an account of the implementation context in Kaya and Burkina Faso that has been described in detail in previous work packages (WP 2, WP 3 and WP 4). The table below summarises the main findings.

Table 6 – Contextual factors identified in baseline studies in Burkina Faso

Contextual Factors National/District level	<ul style="list-style-type: none"> - Reduced funding for the health sector - Comprehensive postpartum policies based on international guidelines - PPC visits schedule: immediate, Day 6, Week 6 - National strategy particularly promoting integration during postpartum period - Only 49% of the women attended postpartum consultation in 2009 - Lack of district supervision visits - Weak referral system - Weak health information system
Contextual Factors Health facility level	<ul style="list-style-type: none"> - Lack of essential equipment and drugs to offer PPC - Essential package of services not offered - Lack of human resources - Lack of skilled HFWs - High workload for HFWs - Attitude of HFWs - Poorly motivated HFWs - Unequal distribution of staff between rural and urban
Contextual Factors Community level	<ul style="list-style-type: none"> - Lack of knowledge on PPC danger signs - Limited geographic accessibility to the HF - Preference for traditional healers - Poverty - High out-of-pocket payments - Very low uptake of FP - Home deliveries not allowed

All four HFs evaluated in the case studies are organised in a similar way. The HFs are split in two parts: the dispensary (for out-patients) and the maternity. Each HF has also a pharmacy (*dépôt pharmaceutique*) where patients can buy the prescribed drugs and commodities (such as gloves, syringe, etc.) that are not subsidised. The main difference between the HFs studied is the number of staff. Urban HFs tend to have much more staff (between 17 and 19) whereas the rural HFs tend to have between 1 and 3 HFWs. The case study facilities had comparable numbers of deliveries per month as the non-case study facilities with C2 having around 20-30 deliveries per month, C1 and C4 having around 30-40 deliveries per month and C3 having 60-80 per month (Figure 8). Of all the 12 facilities in the district B (facility names are anonymised) had the fewest number of deliveries per month: only around 10-20, and N had the highest: around 40 to 80 (Figure 8).

Figure 8 – Number of deliveries per month in case study and non-case study facilities in Kaya district, Burkina Faso



3.3 Implementation Strength of interventions

The implementation strength of the interventions in Burkina Faso are mapped in Figure 9. In terms of the dose of the intervention nearly 100% of the activities listed in the Gantt chart developed at the start of the implementation (2013) were completed. The interventions were carried out over duration of 24 months (See Appendix 2 for details on intervention timelines). While intervention 1 started on time, there was a delay of 3-4 months for interventions 2 and 3. To maintain the intensity of the intervention, refresher trainings were conducted annually. Checklists and guidelines were developed to support PPC activities and regular monitoring and supervision visits were conducted with feedback being provided to the staff. In terms of conceptual clarity (specificity), there is a lack of understanding about how care delivery processes have changed. The interview data suggests that staff did not feel that the care being implemented was substantially different

from what they were already delivering. On the one hand they expressed that the interventions were very easily delivered, fitting well with current practices, but on the other hand there did not appear to have been a substantial shift in planned or actual practices. In terms of intervention fidelity, AVs were able to describe in detail the danger signs in women and infants to look for in the postpartum period and knew the PPC visit schedule at the HF. In other words, the intervention was delivered precisely as it was described in the original work plan. There has been no changes or deviations from the original work plan. A summary of the implementation strength is outlined in Section 7.1.1.

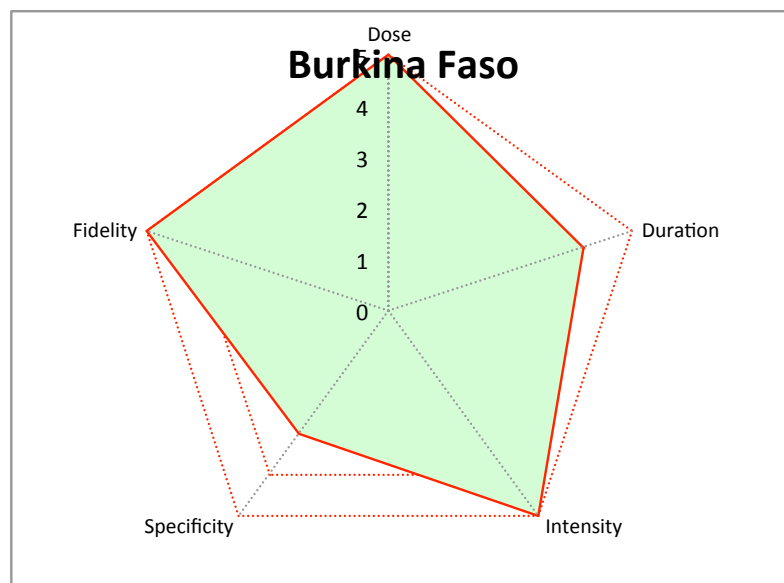


Figure 9 – Implementation strength in Burkina Faso

3.4 Supporting mother and infant during the postpartum period with the support in the community of the Accoucheuses Villageoises

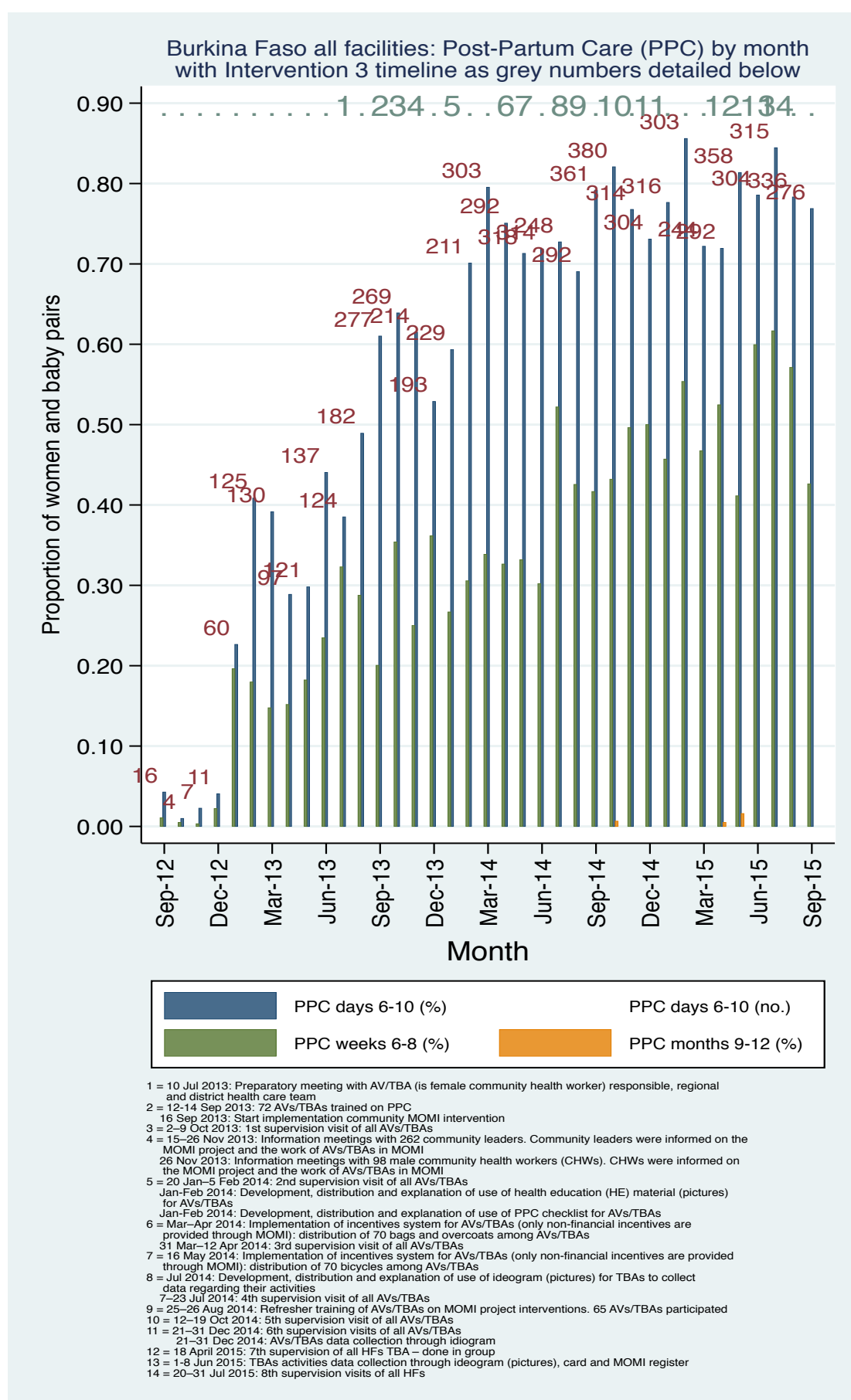
3.4.1 Attendance of women at the health facility for PPC

Across all the HFs evaluated in the case studies, all interviewees agree that the number of women, including those delivering at home, who attends the HF for postpartum consultations, has considerably increased. Observations conducted during field visits and data collection support the interviewees' judgement. Furthermore, the HFWs interviewed put forward that attendance is at its highest at the Day 6 visit whilst women do not attend

the Month 9 visit. The monitoring data collected confirms these trends (Figure 10; please see appendix 7, Figure A7.7 for PPC data for each facility).

Attendance of women at the HF for PPC visits is the outcome of the three interventions implemented. We will explore over the next sections the reasons behind the variations observed in women's attendance, focussing in the first instance on the impact of intervention 3 at the level of the community.

Figure 10 – Postpartum care attendance in health facilities in Kaya district, Burkina Faso



3.4.2 Motivation of the Accoucheuses Villageoises

The MOMI project is in line with national policies in Burkina Faso. The innovation the project brought about was the involvement of the AVs in PPC. Their original role was to accompany women to the HF for delivery. Under MOMI, AVs were also to take women to the HF for PPC consults, as well as provide health talks around postpartum danger signs and the importance of PPC during home visits and community sensitisation events. In Kaya district, AVs became the main driver for women to attend the HF.

High retention rate

Remarkably, the retention rate of AVs during the MOMI project remained high. Out of the 72 AVs who started and received MOMI training and incentives, 65 AVs remained active. Interviews revealed that the AVs who did not continue with their job were all based in urban settings. Indeed, it is easier for women in the city to find paid work opportunities, while the main occupation in rural settings is agriculture. Therefore attrition amongst urban AVs was related to the relationship between their dissatisfaction with work conditions under MOMI and ability to find more profitable activities. Two AVs who left the project were interviewed. For them, the non-financial incentives and the 2000 francs (3€) received after each supervision were not enough to maintain their motivation – even though they were told from the beginning about the voluntary nature of the work. Their frustration about their volunteer role came from the fact that (male) CHWs are paid whereas TBAs are not and seemed to have been excluded from profitable health-related activities, outside the scope of MOMI activities.

“Your job of AV it’s voluntary; that’s what we were told at the beginning. But I would like to tell you that voluntary work it doesn’t work in Africa. I am a mother and therefore I have children dependent on me. We had a training and I thought that there would be concrete propositions but it wasn’t the case. During training, I put forward that there should be a fixed amount for each woman accompanied for the AV but the MOMI team let me know that it was voluntary work. Not only postpartum women are sometimes unpleasant when we mention family planning during home visits but also the lack of financial motivation. Despite the 2000 francs received quarterly by each AV, it is still not encouraging. To top it all there are activities at the health facility, like vaccination campaigns, from which the AVs are excluded when those activities are paid.” (AV who left the project, urban area)

However, the majority of AVs expressed that they had a duty to conduct their activities because they had been chosen by their own community and feel valued in the community.

"I accepted because when the people gather to appoint you to do a job, you have the duty to accept to do the job you were entrusted with. If you refuse, it's like you don't care about people's health." (AV₁, rural area)

"It's the population who estimated that she could do such a job and we appointed her" (Woman₁, rural area)

"It's because women chose me (...) to be their Accoucheuse Villageoise and to support them in their healthcare. They trust me and I am committed to follow them with all my heart. They had a vote and I was appointed." (AV₂, rural area)

Furthermore, several AVs mentioned that on top of the endorsement of the community, they had their husband's permission. The husband's support facilitated carrying out their MOMI activities, which require some prolonged absences from home and the field in order to conduct home visits, go to the HF or attend trainings.

"If there is a problem after delivery, even if my husband is not home, I can go without problem. He agreed and he cooperates. It never happened that he was against a situation related to my activities. We planned, he gave me his consent and therefore I accompany women with no worries." (AV₃, rural area)

The role of the AV in the community, since their own community chose them, is an important contextual factor in their motivation to carry on their PPC activities. Because the very presence of AVs had a beneficial effect on PPC, understanding the factors that support or inhibit their motivation to continue their activities is essential.

Understanding of their role

All AVs interviewed had a very good and clear understanding of their role and responsibilities in the MOMI project. They were able to describe in detail the danger signs in women and infants to look for in the postpartum period and knew the PPC visit schedule at the HF. Moreover, they could relate well in their interviews how they interact with women (and their families) during home visits and community talks. AVs interviewed additionally knew who their supervisors at the level of the HF and at the level of the MOMI implementation team are. Lastly, AVs are aware of the localities they are in charge of and usually know who are the AVs working in surrounding localities.

A crucial point came out of the case studies; not only AVs understood what they were expected to do in regards to the MOMI intervention but they also believe in their own role

in influencing the improvement of PPC and more generally improving the wellbeing of their community.

“It’s for our wellbeing because health does not have a price. And also it’s our village and therefore we [the AVs] have to contribute in our village’s development. If we are entrusted with progress in the village, we have to involve ourselves with all our heart for the wellbeing of the community. This is why we gave a lot of ourselves to help improving health.” (AV₂, rural area)

“I think the activity is very important. It is good for us [the AVs] and for the whole population. When you live amongst a healthy population it’s a source of pride as we also contributed to the improvement of the sanitary conditions of the population. Regarding this point, we can say that our efforts were not in vain.” (AV₄, urban area)

Role of incentives

MOMI team members interviewed revealed the difficulties encountered to find appropriate incentives to motivate AVs to conduct their activities in the community. At first, it was thought – to be in line with national guidelines – that AVs could receive a fixed payment for each woman taken to the HF by the health management committee (COGES) of the HF. However the COGES did not want to pay due to lack of funds or because they estimated that they were volunteers themselves and did not perceive the need to pay other volunteers. Hence, the MOMI team decided to offer support and non-financial incentives (to insure sustainability of the project) in the form of: training and supervision visits to support

their activities; bikes to help conduct activities; a pictorial guide to engage women; referral tickets to lighten their workload; overcoats and bags with the MOMI logo for recognition; and small financial compensations to



AVs attending MOMI training – August 2014

attend trainings and supervision visits. We will now explore the impact of the incentives on the AVs motivation.

All 72 AVs received training from MOMI IRSS. All AVs interviewed reported that they found the trainings very beneficial. Training brought knowledge to the AVs about the different danger signs in the postpartum period that require referral to the HF. Furthermore, several AVs reported that the trainings helped them comprehend better the resources given by MOMI to do their job such as the pictorial guide and referral tickets to the HF.

“Yes really there was a change because before we didn’t know the pictorial guide well but after the training, we learnt how to exploit the images. And even the referral tickets for the different appointments, I used to get them mixed up. I would give the one for the 9th month when the woman had to go for her 42nd day appointment. Now with the trainings, I acquired knowledge and I know how to use my work tools.” (AV₅, rural area)

“I think that these trainings reinforced my capacities of intervention on the field and we are better equipped to face some of the realities of the field. The trainings are helping us to better master the themes that we address in the community sensitisation.” (AV₆, urban area)

Overall it seems that the trainings received helped AVs lighten their day-to-day workload. Only one AV, working in the urban setting, mentioned the financial compensation for attending the training.

Trainings were supported by supervision visits from the MOMI team. All AVs interviewed mentioned receiving regular supervision visits from the MOMI team. They described those visits as helpful as their work is checked; difficulties encountered on the field and possible solutions are discussed; and feedback on their activities is provided.

“[They] ask us about difficulties encountered but also about the evolution of the activity. If there are things that we forget to do regarding our job, they remind us and it allows us to improve our way of working. At the same time, they take the opportunity to give us advice to improve our work.” (AV₄, urban area)

Field researchers conducting the evaluation observed a MOMI supervision visit for HFWs and AVs during which AVs seemed to be at ease and did not hesitate to talk. MOMI team members interviewed explain that the close proximity between the MOMI team and AVs is one of the reasons for the high retention rate of AVs according to them.



AVs receiving bicycles, overcoats and bags from MOMI team members – May 2014

AVs also received non-financial incentives: bikes, overcoats and bags. However, these incentives were not really brought up by the AVs during the interviews. Some mentioned that their bikes broke down and fixing it was too expensive, so they ended up not using them to conduct their activities.

Therefore, it was identified that because AVs are members of the community and were chosen by their own community (Context 1), educational activities directed at the AVs (Resource 1) increase their belief in their own role in influencing the improvement of PPC (Reasoning 1). Confidence in themselves will lead to trust from the women (Outcome 1). At the same time, AVs from rural areas value their elevated role in the community (Context 2). Different elements of support provided for AVs in terms of training, supervision and non-financial incentives (Resource 2), reinforce their position and build allegiance with the formal healthcare system and motivate AVs (Reasoning) to provide effective bridging function (Outcome 2) (see Figure 11).

3.4.3 AVs as a bridge between women in the community and the HF

Trust between the AVs and the women

From the baseline studies, it was identified, as a context to the trust between AVs and women, that acceptance of postpartum service depends on the trust and relationship between the women and the formal healthcare system. Women and their families rely on the community and traditional healthcare system for healthcare (Context 3). Additionally, CMO configuration 1 led to mutual trust between women and AVs, which became also part of the context (see Figure 11). The resource provided by MOMI in that context was AVs delivering the information to the community and visiting women in their homes (Resource 3). It was hypothesised that AVs who come from the same community may be perceived as more trustworthy and provide a bridge to the formal health sector (Reasoning 3); leading in

turn to the possibility that AVs may influence women's views on benefits of PPC differently from other source of advice (Outcome 3).

The above CMO configuration was confirmed by the data collected in the case studies. AVs were instructed to conduct home visits and community sensitisation around themes related to PPC such as danger signs in mother and newborn, consultation visits at the HF, postpartum family planning (PPFP), hygiene, exclusive breastfeeding. AVs



Community session on postpartum family planning, led by an AV - April 2014

interviewed reported that they used social gatherings in the community, for example weddings and christenings, as a platform to deliver their message and interact with the community. Several AVs further mentioned they also took advantage of community outreach events organised by the HF or other NGOs to raise awareness around PPC and get updated on women who recently delivered in the localities they are responsible for. Whilst communities were already used to community sensitisation events, MOMI introduced a new concept of home visits for postpartum women, concept that was difficult to accept at first.

"At first we were facing some difficulties. But over time trust was established. Because we were appointed to be AVs, the population knows about us, plus since we are from the same community we benefit from some credibility." (AV₇, urban area)

"Often if a man sees you coming in his house for the first time, his face will express discontent, but since we are from the same community, he will let us talk with the women. But now everyone understood the importance of our talks and respect them." (AV₈, rural area)

"She [the AV] is very efficient and help us a lot during follow-ups. Even if it is night time and you inform her that a woman is in labour, she comes without hesitation; often she jumps on her bike to follow you [to the HF]!" (Woman₁, rural area)

AVs were provided with pictorial guides to engage women. All AVs respondents stated they always use the tool that is widely accepted by the women. Most explained that they show the images to the women during visits, ask them what they see and what they think and the AVs build on with missing information, which was confirmed by observations during data collection.

“If she [the AV] speaks verbally it’s like gibberish for us! But with the images, we look ourselves and it’s even better!” (Woman₂, rural area)

One AV explained that she suffered from several postpartum complications herself and couldn’t do home visits for a while, so women came to her house and the AV ‘became the pictorial guide’ and shared her experience on PPC with them.

Regarding Context 3, whereby women rely on traditional medicine for healthcare, it would seem from interviews with the community respondents that this context has changed during the time of implementation. Indeed, they were all unanimous in saying that women don’t rely on traditional medicine anymore and do attend the HF in case of ailments or complications, especially when it concerns the baby. Reasons put forward by women and AVs for this change are: traditional healers are expensive whereas the drugs at the HF are free and healthcare is free for children under 5; nowadays ‘diseases are diseases of the white man’ so the traditional healers cannot cure anymore hence why it is needed to attend the HF; perceptions that traditional medicine is inefficient, as more deaths result from attending the healers than the HF. However, from the data collected, it is not possible to evaluate the impact of MOMI on this contextual change. An alternative hypothesis could be that women still rely on traditional medicine but that it is not acceptable anymore to be open in the community about following traditional medicine methods.

Bridge function of the AVs

The outcomes resulting from the AVs motivation (Outcome 2) and the information provided by the AVs (Outcome 3) both become the context for the bridging function of the AVs as there is mutual trust between the AVs and their communities (Context 4). This mutual trust will provide a means of bridging between the community and the healthcare sector (Resource 4) removing some barriers to attending for healthcare such as fear of the formal healthcare sector (Reasoning 4). As a result it will influence attitudes to whether or not women attend the HF (Outcome 4) (See Figure 11).

AVs are seen by the community and the HFWs as a dedicated asset. Women have understood the importance of their message on PPC, and although it was difficult at first, AVs report that women are following their recommendation to go to the HF in case of complications and to attend PPC appointments. Women interviewed described AVs as ‘a point of reference’ in the community for matters related to motherhood and are ‘the relay between the village and the hospital’. AVs also became the advocates of women at the HF when they accompany women.

“There is some women who want to come [to the HF] but maybe they are scared of the HFWs. But they tell themselves that if there is a woman [the AV] who works with health workers, who collaborates with health workers, if I am accompanied by her, all my problems, my worries would maybe diminish with her assistance” (HFW 1, in charge of the HF, urban area)

“If the AV is present, it’s easy for women to explain to the midwives what they are suffering from.” (AV 9, rural area)

The MOMI activities of the AVs have also strengthened their ties with HFWs. Many HFWs, both in urban and rural areas, have commended the efforts of the AVs. Not only have they increased the demand for PPC from the women – which improves the PPC indicators for HFWs – but they also come to the HF every month to hand in their reports regardless of access barriers.

“If the AVs don’t do their job as frequently, it would be difficult to get all the women [to come to the HF]” (HFW 2, rural area)

HFWs also make use of AVs to chase up women that did not turn up to their Day-42 appointment. AVs turned out to be a useful resource for HFWs, who also use the most dedicated AVs to assist with activities at the HF and in community outreach.

HFWs pointed out that the AVs activities significantly contributed to the improvement of their PPC indicators. AVs confirmed that women are now attending their Day-6 and Day-42 appointments to the point that their workload had decreased, since women don’t necessarily wait for the AV visit to attend the HF.

“What makes us know that people think the work we do is a good thing, it’s that sometimes when we don’t go to the women homes to remind them of their appointment we realise that they have already been to the CSPS [HF]” (AV 2, rural area)

“Often as the date approaches, it is the women themselves that keep a watch on you, and even let you know that the date of the consult is getting close.”
(AV₈, rural area)

However women are not attending their M9 appointment (Figure 10). AVs did not speculate on the reasons behind this lack of attendance except for one, who thinks it is because Month-9 visit is about family planning. Other sources of data did not shed any light on this trend, but MOMI researchers indicated that some women do come for M9 but the data collection method for this visit is inadequate.

However, AVs encounter difficulties reaching all women in their localities. Some AVs have small localities to serve and explained that the task is manageable. On the other hand, some AVs are responsible for larger localities and cannot know who are all the postpartum women or women about to deliver. Some women interviewed, reported that although there are AVs working in their village, they did not receive home visits because they live too far from the AVs who decided to focus on closer neighbourhoods to them. Nevertheless, those women attended the postpartum visits at the HF as they were reminded by the HFWs. AVs additionally faced challenges at the beginning of implementation that we will explore in the next section.

3.4.4 Influence of the community

Community leaders as facilitators of implementation

Data collected in the baseline studies revealed that women living in communities where MOMI was implemented were not empowered to make decisions on when and how to seek healthcare or about the healthcare they receive (Context 5). With this in mind, MOMI IRSS raised awareness on PPC at the beginning of implementation (see Appendix 2) 262 community leaders – as well as 98 male CHWs – and informed them of the MOMI project and the role played by the AVs.



MOMI meeting with community leaders – November 2013

AVs interviewed stressed how much the fact that they had the support from the community leaders significantly facilitated carrying out their activities. Indeed, since AVs were backed-up by the community leaders, their work was even more legitimate in the

eyes of the rest of the community.

“They [the women] simply see that it is for their own good and also the villages leaders, the traditional leaders, the country’s authorities are all involved so they know it is serious. They saw that it is to assist the smooth functioning of family life.” (AV₅, rural area)

Hence interventions (Resource 5) that work to motivate community leaders to become involved (Reasoning 5) are more likely to be successful (Outcome 5). This CMO configuration will in turn facilitate the context in which Resource 4 take place (see Figure 11).

Role of husbands

Husbands (and in some cases the fathers-in-law) are the head of the household, and therefore the decision makers. All AVs described the same protocol at the beginning of home visits, during which they first have to introduce themselves to the head of the family and ask permission to speak to the postpartum women living there.

“When we arrive in the family, we will seek to see an elderly, for example if the head of the family is there, we greet him and ask permission to see so-and-so. If it is his wife or his daughter-in-law, we inform him we were sent by the midwives to discuss with the woman. (...) If you enter a courtyard without asking for permission and you try to discuss with the woman, you might get chased away.” (AV₈, rural area)

In case of complications, several AVs explained that they go straight to the husband, instead of the postpartum woman, to convince him to take his wife to the HF since the woman would not be able to get healthcare without the husband’s permission.

“I will talk to her husband otherwise if you are talking to the wife it’s pointless. If you speak to the wife and she doesn’t have money she won’t be able to go [to the HF]” (AV₃, rural area)

“When we go talk to the woman, if something is wrong, us the AVs we go see the husband and we tell him to see his wife and take her to the health facility; we plead for the husband to send his wife to the health facility.” (AV₁₁, urban area)

However, a couple of HFWs pointed out that women in urban areas are more autonomous in their decision-making regarding seeking healthcare.

“The woman when she delivers, she is the one who handles her child, she is the one who chooses where she will go, because she is the one herself, financially, who gets by for the care of her child, she is the one who makes the choice. (...) In rural setting it’s the guy [husband] who chooses and it’s when

he wants that the mother can come to the HF. Often the child is sick, for over a week, the woman waits, she wants to bring the child, the guy says no way; so it's the husband who decides." (HFW₃, urban area)

Several AVs described how difficult it was at first to get accepted by the husbands, mainly because they were thought to be here to convince women to get family planning.

"Ah! Before we were scared. We were scared because when you would go to a home to talk with a woman, some men thought it was to sensitise their wife on birthing spacing, that's why we were scared. But now everyone knows, when you arrive they just give you permission to come in and speak to their wife." (AV 1, rural area)

However they reported that their presence has now been accepted and on several occasions, the head of the families (and other members of the family) sat down with the AVs to listen to the talk and look at the pictorial guide. As a result, many husbands understood the importance of PPC and support their spouses in attending the HF.

Nonetheless, family planning is still not accepted by husbands who believe it will make their wives sterile or sick. They actually constitute the main barrier to postpartum family planning provision during PPC visits. Women need their husbands' permission unless they are willing to get family planning secretly.

Consequently, there is a widespread fear of the effects of family planning among the community. Women wishing to limit family size need to be given 'permission' from their husband before they will seek contraception (Context 6). Acceptance from women will depend from the presence and/or agreement of the husband (Reasoning 6). Thus, women may or may not accept the care offered within a healthcare setting or the community (Outcome 6) (See Figure 11).

Influence of other women

AVs put forward another determinant that facilitated women following the AVs' recommendations to attend the HF: the influence of other women. Indeed, AVs explained that women at first did not know about the importance of PPC and were not aware that they were supposed to go back to the HF after delivery. They assumed that any necessary care was provided during delivery and not after. Thanks to the sensitisation activities led by the AVs, those conceptions have changed and women now rush to the hospital in case of complications. However, women themselves played a role in sensitising other women.

“I think that group sensitisation had the advantage that, in the group, some will hear the message for the first time and after will talk to those that stayed home. Next time they will hear about a talk taking place, they will be motivated to come and listen out of curiosity. The individual talks are good too because you can discuss with a woman and then she will talk to another and tell her ‘there is an Accoucheuse Villageoise who came to talk to me and the talk is good so if she comes towards you, listen to her, because her talk is good’. (AV₁, rural area)

Moreover, all AVs explained that women adopt the behaviour of other women. Therefore the women that first attended PPC consults – after recommendations of the AVs – were satisfied and shared their experience with other women in their communities who then decided to also attend the HF for PPC. This behaviour change was further facilitated by the fact that appointments for antenatal and infant care are already some kind of ritual event as women always go to the consultations in groups.

“These people who refused at first are now the people who adhere the most because they saw the others who adhered and were well so they decided to adhere as well. (...) Those that refused at the beginning we didn’t have to go sensitise them. It’s the fact they saw the positive change in the life of the other persons that made them decide to adhere too.” (AV₁₀, urban area)

“Those that had the courage to go to the health workers galvanised those that were not going to go.” (AV₅, rural area)

“It’s when the first women started to do it and we knew there was nothing bad to it but on the contrary it was to help us, that we started to get used to it little by little.” (Woman₁, rural area)

Hence it was deduced, based on the testimonies collected in the baseline and end-evaluation studies that women had little formal education on health and did not perceive the need for PPC. Furthermore, community level events amongst women create social cohesion and social capital (Context 7). Given this context, influencing behaviours are adopted (Reasoning 7) when PPC is promoted in the community (Resource 7). As a result, the information is more likely to generate changes in belief systems of individuals and communities (Outcome 7). In turn, a critical mass of women in the community believes in/attend for/are more aware of the accepted healthcare strategy to the point it becomes the community ‘norm’ (Context 8). Because women learn informally through their interaction with other women (Resource 8) and are motivated to behave in similar ways (Reasoning 8) all women in the community will then accept the healthcare strategy (Outcome 8) (see Figure 11).

3.4.5 Barriers to healthcare access

Women face a considerable amount of barriers to get to the HF, especially women living in rural areas. We have seen previously that the majority of women need permission from the husband to attend the HF and require him to provide the money necessary to meet the costs of attending the HF.

Moreover HFWs, AVs and women interviewed portrayed other important barriers faced to access the HF. Geographical barriers in particular have been mentioned, even by respondents in the urban case studies. A majority of women – as well as AVs when they need to go to the HF – have long distances to travel to get to the HF. Furthermore, some postpartum women do not have a means of transportation and have to walk for hours, sometimes with their stitches still in place if they are going to the D6 consult. Even for those with transportation, the road conditions are poor and the journey remains difficult. The situation is worsened during rainy season, when many roads become flooded and impracticable. A few HFWs in rural areas explained that during rainy season, some women have to cross several water streams to get to the HF, hence why attendance decreases during rainy season.

Although PPC consultations are free and healthcare for children under 5 is subsidised by the NGO Save the Children, women still have to meet costs such as transportation, and at the HF have to pay for gloves (50 francs/10 cents) and speculums (800 francs/1.20€) that are not subsidised, as well as family planning if they choose to (around 300 francs/50 cents). While some women mentioned that those costs are too high, others estimate that the health benefits gained outweigh the costs.

“The vital thing is that we are cured of the diseases we are suffering from. (...) Some people think that the costs are too high but for me, the simple fact of getting healthy by coming to the health centre is more than the costs we incurred.” (Woman₃, urban area)

“This cannot stop us from coming back next time. If you refuse to pay the gloves so they can care for you, well for 50 francs if you refuse to pay the gloves to be examined and it becomes a disease you’ll have to go to the hospital and pay a lot for drugs.” (Woman₄, urban area)

Besides, some women are not willing to face those barriers as they feel fine and do not see the need for care, hence why AVs need to sensitise women on the importance of PPC regardless of how they feel. Some HFWs explained that they have to convince women to

come back, not just for themselves but also in order to get their infant vaccinated. On the other hand several of the postpartum women respondents stated that they would face those barriers for each consult, as they perceive the importance of PPC for their own health and their baby.

"[The consult is] useful because often you can still have a wound in your genitals without knowing, so if you don't come back, you won't know. (...) Because if you go to the hospital, the HFWs can find something wrong and heal you or you might think you are in good health but if you go there they will confirm." (Woman₅, urban area)

"I think that the fact you want to be examined it's because we want our health to improve so we can look after our children for better tomorrows." (Woman₄, urban area)

In conclusion, even if women have been sensitised about PPC they still need to overcome barriers such as socio-cultural and geographical barriers. Additionally, they might not want to face those barriers if they feel fine (Context 9). Therefore the risk-benefit analysis decision of not attending for PPC is weighted against the structural barriers to reaching is generated (Reasoning 9) in response to the information provided through health promotion activities (Resource 9a), including those related to care of their babies – such as vaccination – when care is integrated (Resource 9b). This risk-benefit analysis will determine whether women attend or not for care (Outcome 9). Furthermore, the financial costs of visiting the HF (Context 10) will influence whether interventions are effective (Resource 10) in motivating attendance for PPC (Reasoning 10). Thus women may or may not go to the HF to receive PPC (Outcome 10).

Figure 11 below, summarises the CMO configurations network that are taking place in the community, which eventually lead to a woman attending, or not, the HF for PPC.

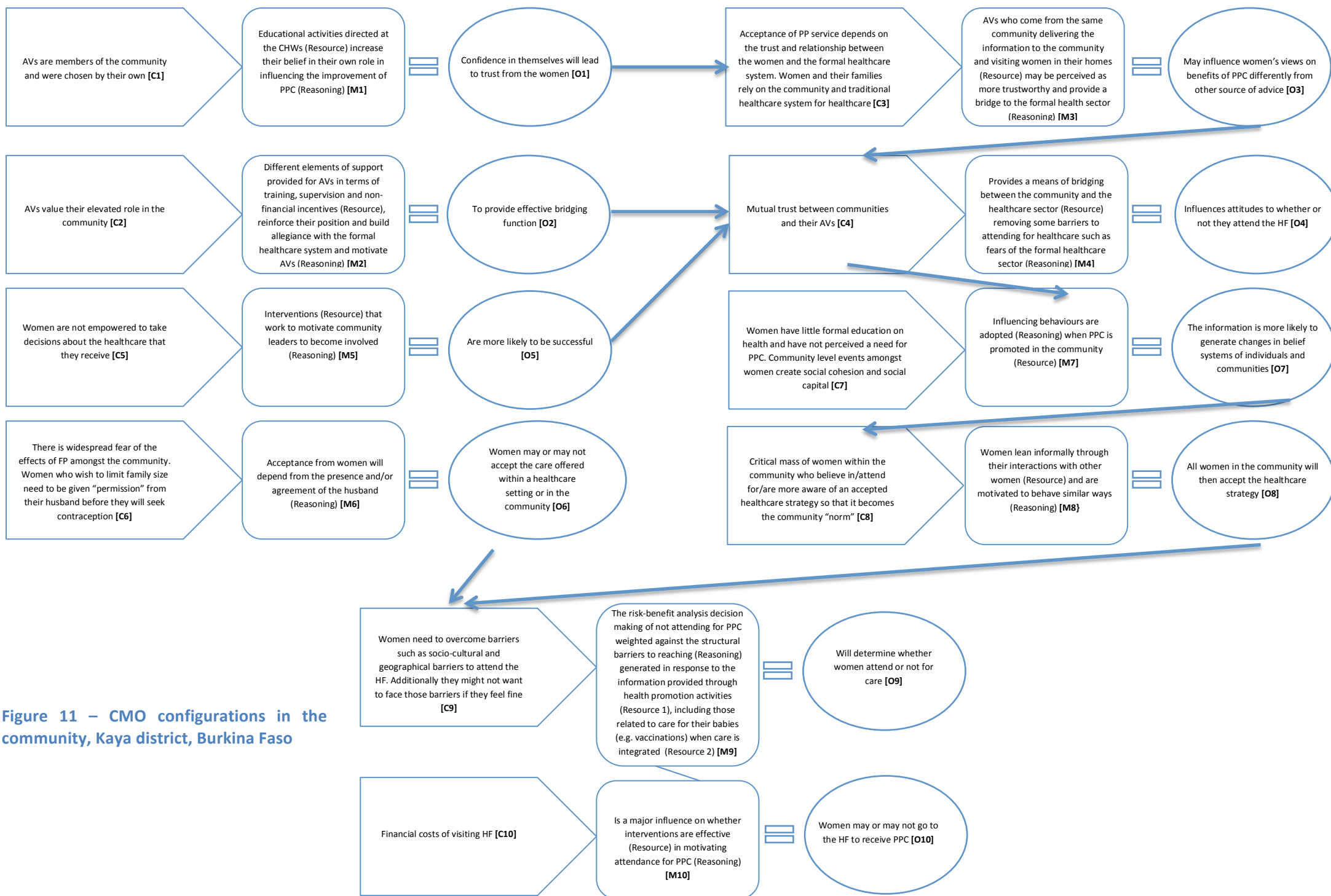


Figure 11 – CMO configurations in the community, Kaya district, Burkina Faso

3.5 Enhancing the delivery of postpartum care in health facilities & Integrating maternal and infant services in the postpartum period

3.5.1 Capability & Motivation of HFWs

Health Facility Workers are the main implementers of intervention 1 and 2 at the level of the HF. Therefore, in the first instance they need to be capable and motivated to provide PPC, an activity that – although was part of the health workers core activities – was neglected.

HFWs were therefore provided with trainings, including refreshers, by the MOMI IRSS team. What stands out from this activity is the high number of HFWs trained over the period of implementation (see timeline in Appendix 2). This has also been reflected upon in the case studies. Out of the 16 HFWs interviewed across the four case studies, only 2 did not receive training; one was sick on the day of the last training while the other HFW had only started working in a MOMI HF a couple of months before the end-evaluation. Several of the HFWs interviewed had changed HFs during implementation of MOMI activities and still received MOMI training. A fact that HFWs were aware of:

“Anyway, a health worker working in a CSPS [HF] where MOMI is implemented cannot say that he wasn’t trained.” (HFW₄, urban area)

HFWs interviewed mentioned that the trainings provided had several effects on their work:

- Some felt more confident about conducting the PPC consultations while some thought that the training allowed them to conduct their PPC activities without difficulties.
- Several acknowledged that their knowledge on postpartum complications and how to handle them was improved.
- A few reported that the training made them perceive postpartum women coming for PPC as sick patients and therefore needed to be treated with as much emergency as a sick patient.
- A handful was reminded of the importance of postpartum family planning and its impact on the communities’ wellbeing.
- Many explained that they are now filling out the postnatal register better, thanks to the training and subsequent supervision visits.

- A few expressed that the trainings improved the way they deliver PPC.
- Several HFWs understood the importance of delivering postpartum services to the mother and infant.

When asked if they could handle postpartum complications, most respondents indicated that they did not encounter any major complication, and that in case of complications they knew they could always ask the midwife in charge of the maternity (in urban case studies) and refer the case to the hospital if not equipped or capable of handling the complication.

Looking at the quantitative data on post-partum maternal complications (Figures 12 and 13) it appears that the protocols were followed for virtually all cases of post-partum haemorrhage (PPH), sepsis (PPS) and anaemia (PPA). The number of cases of haemorrhage appears to increase dramatically from September 2013 following the MOMI training on PPC. It is unclear what protocol was used for management of postpartum haemorrhage before this, how exactly the MOMI protocol improved on the existing detection and treatment of PPH, and how much of the increase in recorded PPH (and concurrent protocol use) was due to better reporting or better management of postpartum women. The same approximate pattern can be seen for PPS (Figure 13) and the numbers of PPA are too low to make any trend assessments. For PPA, field observations indicated that mild or even moderate anaemia was often not diagnosed and only severe cases were diagnosed and recorded. There was only one recorded PPH death (Figure 12) and one recorded PPS death (Figure 13).

The quantitative data on neonatal complications indicates an initial decline in newborn fever or high temperature from September 2012 to January 2014 and then an increase and another decline (Figure 14). Again, it is not clear how this is related to MOMI activity (as indicated on the numbered timeline). The first decline does not coincide with MOMI activity, though the second decline does, and could possibly represent a delayed effect of better management prompted by MOMI, although it is also possible that, especially in latter months when far fewer cases are recorded, that only diagnosis and reporting declined. As with the maternal complications, virtually all cases of neonatal temperature anomalies were indicated to have had the protocol followed. Details are lacking though, most crucially on whether there were different protocols for hypothermia and for fever, how they differed, the trends in diagnosis and management of each and how they relate to specific MOMI activities in each facility. Figure 15 shows the trends in neonatal prematurity and management. Although the proportion of babies recorded as being premature seems very low – suggesting incomplete data capture – it does appear that the proportion for which the

prematurity protocol was followed does increase following the start of MOMI activity in September 2013 (Figure 15). Please see appendix 7, Figures A7.1 to A7.5 for maternal and newborn complication data per facility.

Figure 12 – Postpartum complications for mothers in all facilities in Kaya, Burkina Faso:
Haemorrhage

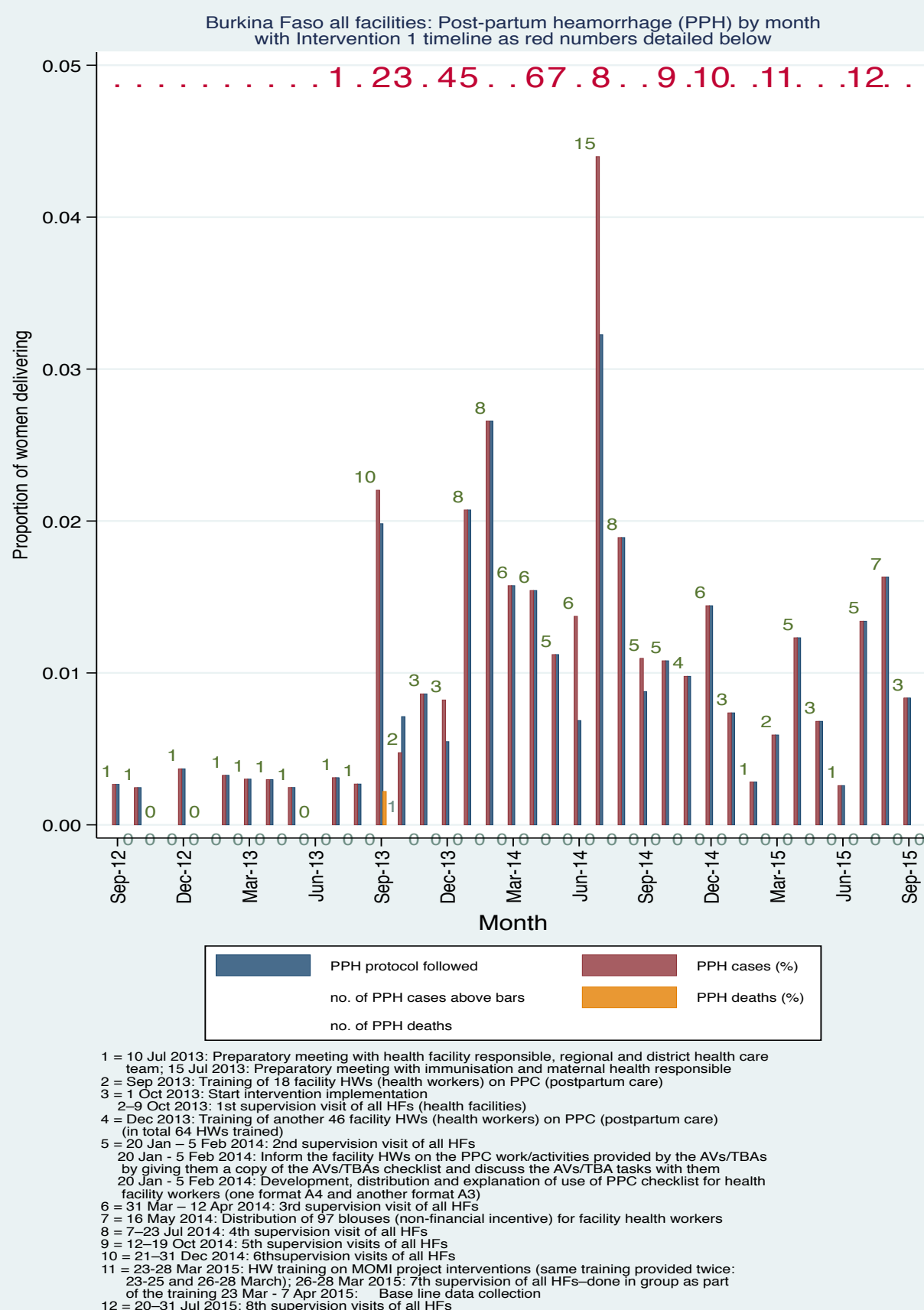
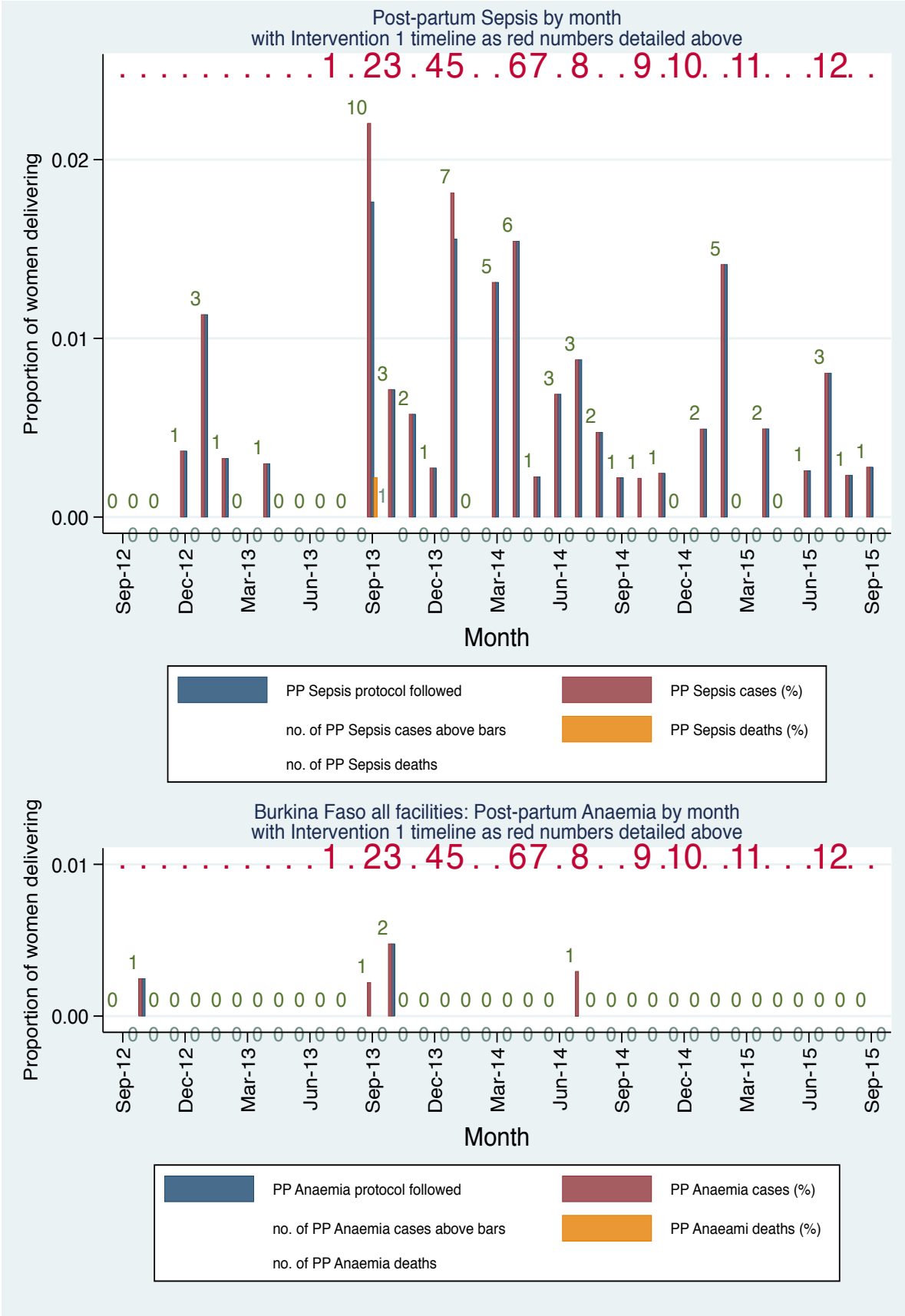


Figure 13 – Postpartum complications for mothers in all facilities in Kaya, Burkina Faso: Sepsis and Anaemia



See Figure 12 for timeline key

Figure 14 – Postpartum complications for infants in all facilities in Kaya, Burkina Faso: Newborn fever and low temperature

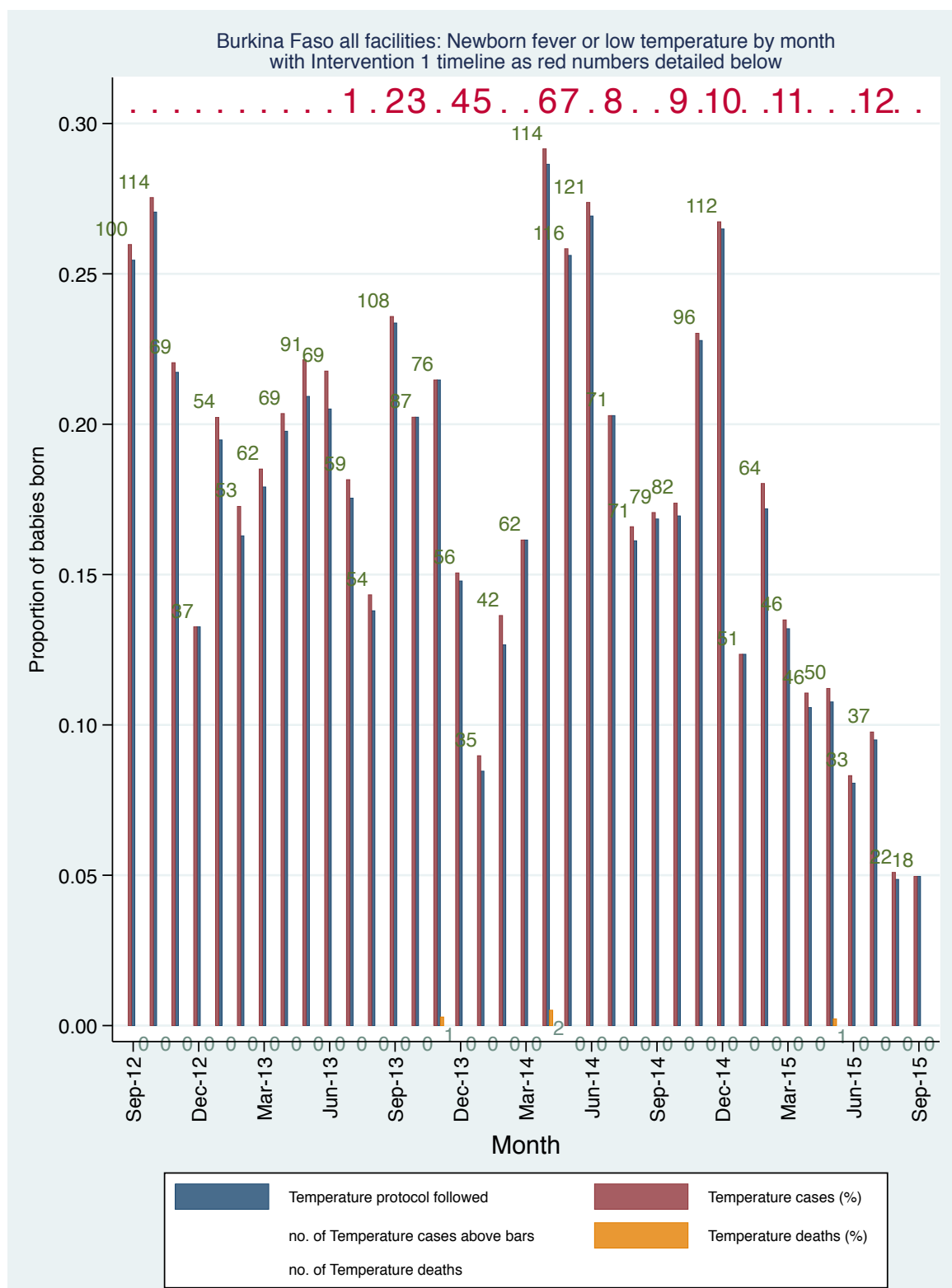
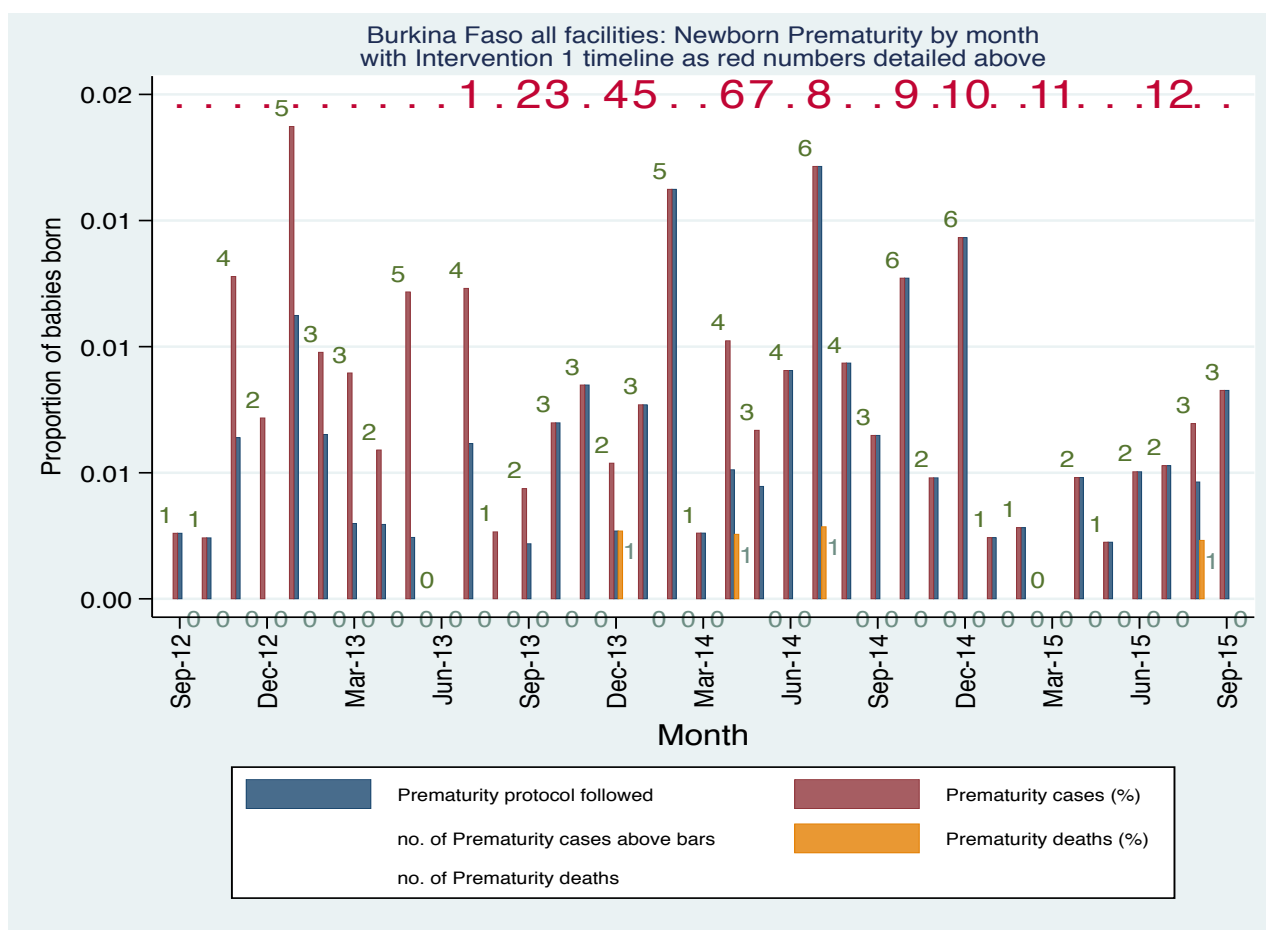


Figure 15 – Postpartum complications for infants in all facilities in Kaya, Burkina Faso: Prematurity



See Figure 12 for timeline key

In addition, HFWs received quarterly supervision visits by MOMI IRSS with representatives from the district. The respondents perceived supervision visits as formative rather than score settling, and as necessary and useful. Some pointed out that it was a way to get reminders on things that may have been forgotten since the last training. Other explained that supervisions were necessary to conduct the activities properly and that some other activities at the HF for example were not doing well because of the lack of supervision. HFWs appreciated the supervision visits and the majority of the respondents mentioned that supervision visits are motivating them.

“When they come, and you know there are people in higher positions than you that come to see what you are doing, it’s already encouraging. The fact as well that they come to supervise you, it makes you motivated to work more too.” (HFW₂, rural area)

“The supervisions are useful. I tell myself everything we do, if we have someone who comes to appreciate the work, I think that it really enables us to move forward.” (HFW₁ in charge, urban area)

“The [supervision] teams who come we see that they are devoted to it [MOMI], so why not accompany them?” (HFW₄, urban area)

End-evaluation field researchers observed a supervision visit at an urban HF and confirmed that the atmosphere was good and the conversations with the HFWs were frank and open.

These motivated statements from the HFWs differ a lot from the baseline studies where it was identified that healthcare workers do not feel motivated or empowered to provide emergency or routine PPC due to a range of health system constraints including lack of training and knowledge (Context 11). Therefore, trainings and supervision visits (Resource 11) may increase self-efficacy and enable the healthcare workers to obtain more job satisfaction (Reasoning 11) through delivery of comprehensive PPC, which in turn are more likely to become embedded (Outcome 11).

Another important factor to motivate HFWs came out during the end-evaluation. The community intervention led to an increase in attendance at the HF by women for PPC (Context 12). Before MOMI, most women did not come for PPC and HFWs were neglecting the provision of postpartum services. However, since more women are attending the HF for PPC (Resource 12), HFWs have a chance to improve their PPC (national and Pay-for-Performance) indicators, which motivate HFWs (Reasoning 12) to deliver the PPC services (Outcome 12).

“We didn’t attach much importance about it [PPC visits]. (...) Everyone! Women either, did not attach importance because often, we could give them an appointment and they wouldn’t come. But often the staff didn’t insist.” (HFW₅, urban area)

“Because women are coming now, it’s encouraging.” (HFW₆, urban area)

“Well it allows us to give more importance to our work because we see that people are adhering more so us too we are giving ourselves more. And it makes it possible to increase our monthly reports. These data, they increase our numbers for the monthly reports.” (HFW₄, urban area)

Furthermore, an external factor to the MOMI project had a great impact on the motivation of HFWs to implement the MOMI interventions: the Pay-for-Performance (P4P)

payment system, piloted in Kaya district by the World Bank since March 2014. The P4P system bought several national indicators, including some relevant to PPC such as D6 and D42 PPC consultations. In order to receive the financial contribution from P4P, HFWs need to treat patients (quantity) according to national guidelines (quality). Therefore the MOMI project, which increased the number of women attending the HF for PPC (intervention 3) and enhanced the delivery of PPC (intervention 1), improved the PPC indicators for D6 and D42 providing the HFWs with a financial incentive, via P4P, to implement the PPC activities.

“Well it was a care that was neglected before, we [HFWs] neglected them before. But now, with MOMI and P4P, this care is remunerated. So it means that currently there is enthusiasm.” (HFW₇, rural area)

“Yes it [P4P] is a source of motivation of course because at the moment we want that the women respect all their appointments too.” (HFW₄, urban area)

“With P4P, well because it [PPC] is a quality factor for P4P, we are thus obligated to sensitise women to come back since P4P pays this indicator so there is improvement.” (HFW₈, urban area)

Therefore, the wider policy context and HF culture for delivering a change to PPC – such as national indicators for PPC and P4P indicators on PPC – is important (Context 13) in determining whether HFWs at the frontline are accountable for and therefore motivated (Reasoning 13) to deliver the PPC interventions (Outcome 13) (See Figure 17).

3.5.2 Service Delivery at the Health Facility

Before MOMI, immediate PPC, Day 6 and Day 42 consultations for PPC were already part of the core activities that need to be provided in any health facility, according to national guidelines. However, as seen earlier, on one hand women were not attending the HF for PPC and on the other hand, HFWs were not giving much importance to postpartum services. The end-evaluation revealed that things have changed with now more women attending the HF while HFWs are more motivated to provide PPC.

From the interviews with HFWs, immediate PPC was automatically provided 6 hours after delivery, for women delivering at the HF, before MOMI implementation and still is. Women are then kept for observations between 12 and 24 hours in the rural case studies and between 24 and 48 hours in the urban case studies. However, 2 women in C4 mentioned they did not receive postpartum care before they were discharged from the HF,

and were just asked about how they felt before discharge. This was confirmed in observations at this HF.

“The day of discharge, they came to ask me if I was in pain somewhere, I replied no and they let me go.” (Woman₅, urban area)

HFWs in all case studies have taken some measures to get women to come back for D6 PPC visit. Firstly, at discharge after delivery, women are given an appointment at D6 for a check-up and BCG vaccination for the infant. Thus, women who do not have a MOMI AV working in their community also come back to the HF for D6. Furthermore, all HFWs – except in C3 – took the initiative of keeping the infant’s health booklet to incentivise women to come back at D6 in order to get the health booklet. The booklet is important for women and they will therefore have to attend the HF to get it.

“If you have the health booklet, since they [the mothers] like their booklet, they will come back to get it. (...) Because she knows the health booklet will be used for everything. If she doesn’t come back, how will she do? At the infant consultation, she will be asked ‘where is the booklet?’ and they will know that she didn’t come then. If you come for a curative consult, you will be asked for the booklet.” (HFW₆, urban area)

This also means that women who delivered at home (although in all cases, respondents said that their number is very low) would also have to come to the D6 visit to get a health booklet. Although several AVs and women interviewed mentioned that it would be harder (longer waiting time) for women who delivered at home to get their booklet and postpartum services as they are set by the HFWs as ‘the bad example not to be followed’ in front of other women. In the same way, women that came in time to all appointments are praised in front of other women.

HFWs interviewed all declared providing postpartum services for the D6 and D42 consultations and are able to describe in details the services provided. Observations and interviews with women confirmed that many women were seen for D6, but not as many for D42 although still a significant amount. However, a minority of women still don’t receive care, even if they come back to the HF.

One of the reasons put forward is that the P4P system only counts women that come back between D6 and D8 whereas MOMI guidelines recommend providing care between D6 and D10 to give women the chance to attend the HF. The same applies at D42 where P4P only counts from D42 until D56 while MOMI counts between D42 and D60. As a

consequence, several HFWs would send away the women that came after D8 and tell them to come back for D42.

“I came by at the date I was told, and I did not receive a consult. I left and came back two days later and they told me I couldn’t receive a consult anymore because I largely exceeded the deadline. (...) That day the nurse who was there told me that since it’s exceeded, to wait until the 42nd day.”
(Woman₆, rural area)

A MOMI interviewee involved in supervisions explained that although P4P has helped motivate the HFWs, P4P became an obstacle to implementation as HFWs followed the P4P date range instead of MOMI’s and were repeatedly told during supervisions to take those women into account.

Observations and testimonies from HFWs and women demonstrate that another barrier to women receiving care is the long wait women are facing at the HF. The main reason for this wait is that HFWs have to fill out many health booklets and registers when conducting activities. During observations across all cases, it was noted that most of the time was spent filling out registers. As an example, a PPC visit for D6 was observed, out of the 10 minutes the consult lasted, 8 were spent on filling out registers. This wait is much worsened at the rural HFs where a maximum of 3 HFWs serve the maternity and dispensary at any one time. It was observed during end-evaluation data collection that one HFW providing infant immunisation had to ask a couple of literate women to help him fill out booklets and registers as well as to help writing down the measurements of infants during growth monitoring. The whole process was quite complex and long as the HFW had to, on top of filling out the registers, work out how many infants were in need of each vaccine to make sure they had enough infants to open the vaccine vial. As a result women have to wait for hours at the HF. From the observations and comments from HFWs in urban areas, it seems that the long waiting times, when the HF is particularly busy, is source of friction between HFWs and women from higher socio-economic background that refuse to wait that much.

From the baseline studies it was determined that HFWs are not motivated or skilled to deliver PPC (Context 14). Therefore interventions increasing the quality of PPC provision (Resource 14) lead to more positive experiences for women (Reasoning 14), which further embeds the changed culture of attending for care through a shared community experience (Outcome 14). On the other hand, increasing demand for PPC through community

interventions creates additional pressures on the HF limiting opportunity to deliver opportunistic care (Context 15). Even when capability and motivation are facilitated (Resource 15), poorer experiences for women (Reasoning 15) may have negative consequences at the community level (Outcome 15) (See Figure 17).

3.5.3 Integration of services

Before the MOMI project, HFs organised the provision of services only on specific days. For example, Mondays are usually reserved for curative consults and consults for healthy children (above 1 year old), Thursdays for infant vaccination while Tuesdays and Fridays are for prenatal consultations. However, all HFs studied here are offering PPC consultations at anytime of the week, including on weekends, in order to be able to get the most women within the range of days they need to receive their visit.

The aim of intervention 2 was to integrate infant vaccination and consults for healthy infants with PPC consults. As a result, the HFWs would plan to have on the same day vaccination and consults for infants, while looking for women in need of PPC. In particular, it would be easier during BCG vaccination (received 1 week after birth) to find women who need to be seen for the D6 appointment. However, implementation was difficult and is still on going. MOMI implementers indeed encountered several barriers. The first one is the lack of human resources, especially in rural settings. We have seen



Women waiting for postpartum consults and vaccination for infants in an urban HF – October 2014

previously that attendance of women at the HF significantly increased and that HFWs have to fill out a lot of paperwork while conducting their activities. Therefore integration becomes difficult especially in rural settings where there is not enough staff to integrate services and conduct activities. MOMI team members interviewed explained that HFWs at first did not understand well what was meant by integration of services. They understood that women need to receive PPC but it took a long time to understand that the aim was for the woman and her baby to receive all services on the spot so the woman does not have to queue for the different services.

“When the health facility staff perceive the problem, the implementation of the suggestions, it works. But when the staff don’t perceive the problem the same way than us, we often have to explain and re-explain.” (MOMI implementer 1)



Integration of infant vaccination with healthy infant consults in an urban HF – December 2014

Therefore the degree of integration is different from HF to HF because it requires HFWs to be willing to work in teams and be committed to integrate services. In rural facilities, HFWs had also to work in a context of lack of human resources. In C1, the services for infants were not integrated to PPC consultations and in C2, HFWs are trying to integrate by making PPC visits coincide with the date for infant vaccination. In urban facilities, integration was easier to implement given the higher number of staff although HFWs still had to deal with long queues and many registers to fill out. However, there are still HFs performing better than others. C3 did integrate the healthy infant consults with vaccination while HFWs in C4 explained that the services are integrated, the observations at this HF did not support the assertions of the HFWs. It is also to be noted that in the 4 cases, integration was not physical and therefore women still had to go from the dispensary to the maternity to receive PPC.

Furthermore, HFWs interviewed have explained that all tasks are normally divided between the different staff working in the maternity and in the dispensary. However, since the staff from the dispensary was also trained by MOMI, any HFW could potentially provide PPC. This is helping in the rural HFs where the limited number of staff means that the dispensary staff could take over PPC consults in case the person working at the maternity is absent or overwhelmed. In urban facilities, it means that HFWs working in the dispensary can refer to the maternity for PPC women that came for something else (such as curative consult for their baby). However, in urban areas, the maternity and dispensary of the same facility function as two independent entities. Therefore, integration must deal with power relation between the heads of those units.

“Especially last year, if I wasn’t there, a lot [of women] would leave. A lot would leave. (...) But thank god since everyone received the MOMI training, there is not one person who can say that they can’t take a postpartum woman at the 6th day like at the 42nd day.” (HFW₉, rural area)

“At the level of the other posts [at the dispensary] – such as the curative consults for children under 5, vaccination, healthy infant consults – if we have a case of woman who comes in with her child and she did not go to the postnatal consultation, they refer the woman to this level [the maternity].”
(HFW₁, urban area)

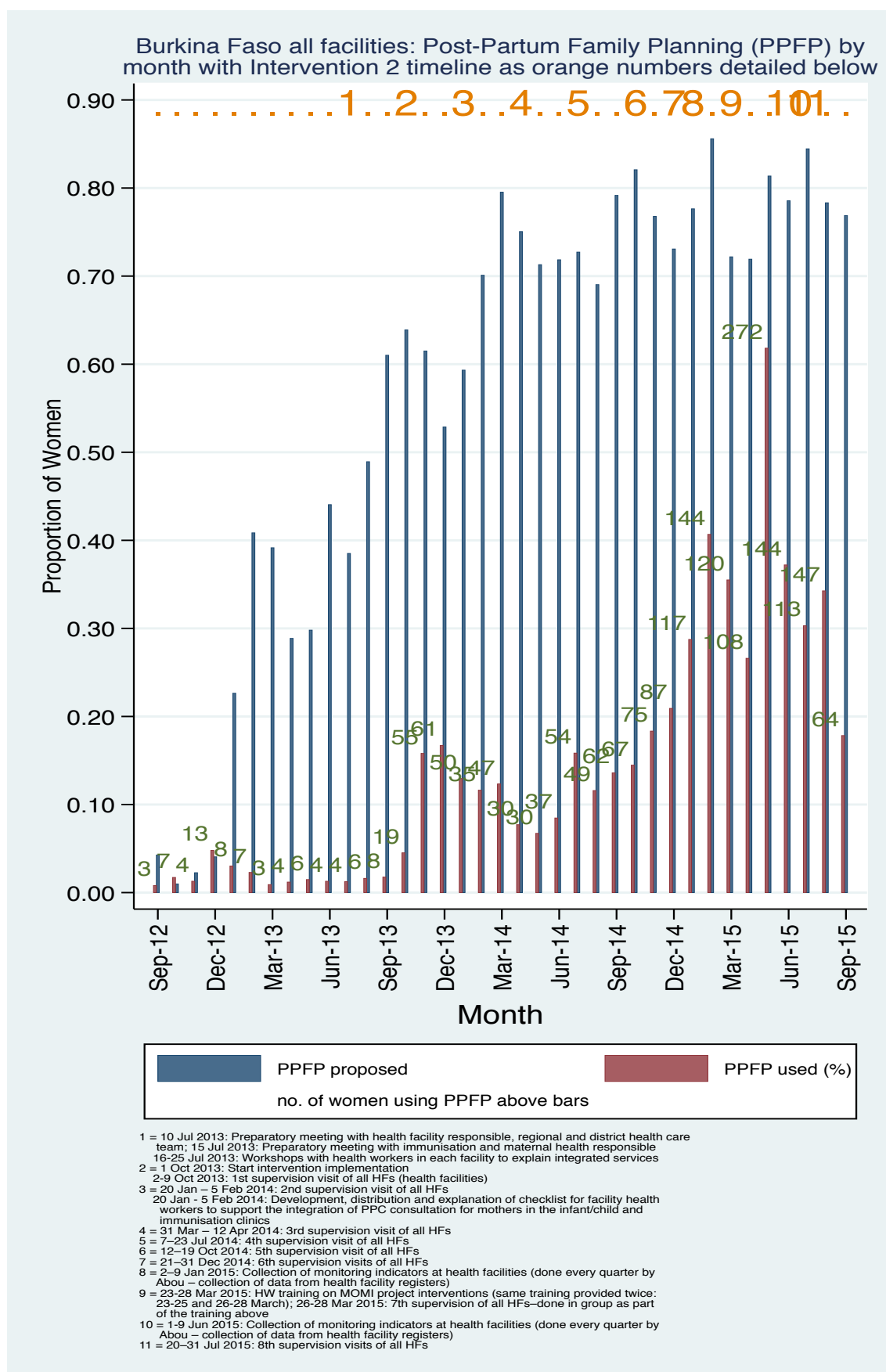
Therefore, the system is set up in a way that HFWs have tight boundaries to their responsibilities for delivering care, often compounded by separate managerial and financing arrangements for maternal and child care (MCH), vaccination and family planning (Context 16). Organisational change and training (Resource 16) that supports shared responsibilities may enable service providers (Reasoning 16) to take on additional roles as part of usual care (Outcome 16) (See Figure 17).

Another aim of intervention 2 was to integrate the provision of family planning with the PPC consultations. It seems that in all case studies, family planning is offered with PPC and can be provided at any time. HFWs interviewed, both in rural and urban facilities, explained that during the D6 consultation they already let the women know that when they come back for the D42 consultation they will be offered counselling on family planning and will be able to choose a method. The HFWs explained that that way they can prepare the women who can then make sure they have money for a family planning method on the day on the second consultation, have thought about a method and more importantly discussed it with their husbands. Indeed, although most women are open to receive family planning they still need to get their husband to accept. The reason behind the sensitisation at D6 visit is that ‘if women leave, they will not come back’ to get family planning hence why they are sensitised at D6 so they are ready for D42.

Figure 16 shows the data on the number of women to whom postpartum family planning (PPFP) was proposed and the number who took up PPFP per month, for all 12 facilities combined. Starting from a very low base in September 2012 there then appears to be a steady increase from around 20% of women January 2013 to around 50% in August 2013. There is then a jump to over 60% in September 2013 and a continued increase coinciding with increased MOMI activity. The proportion of those who were proposed PPFP who go on to use it also increases: from around 5% or less between September 2012 and October 2013, rising to over 15% in November 2013 and then again to above 20% in December 2014 to a peak of over 60% in May 2015. It is possible that MOMI activity could have been behind these large and significant increases in PPFP use. However, the peak in May 2015 is also

highly likely to be related to ‘national FP week’ where the government made PPFP freely available and promoted it, and there were also other significant FP campaigns by NGOs and government throughout 2015. Please see Appendix 7, Figure A7.6 for PPFP data per facility in Burkina Faso.

Figure 16 – Postpartum family planning for all facilities in Kaya, Burkina Faso by month



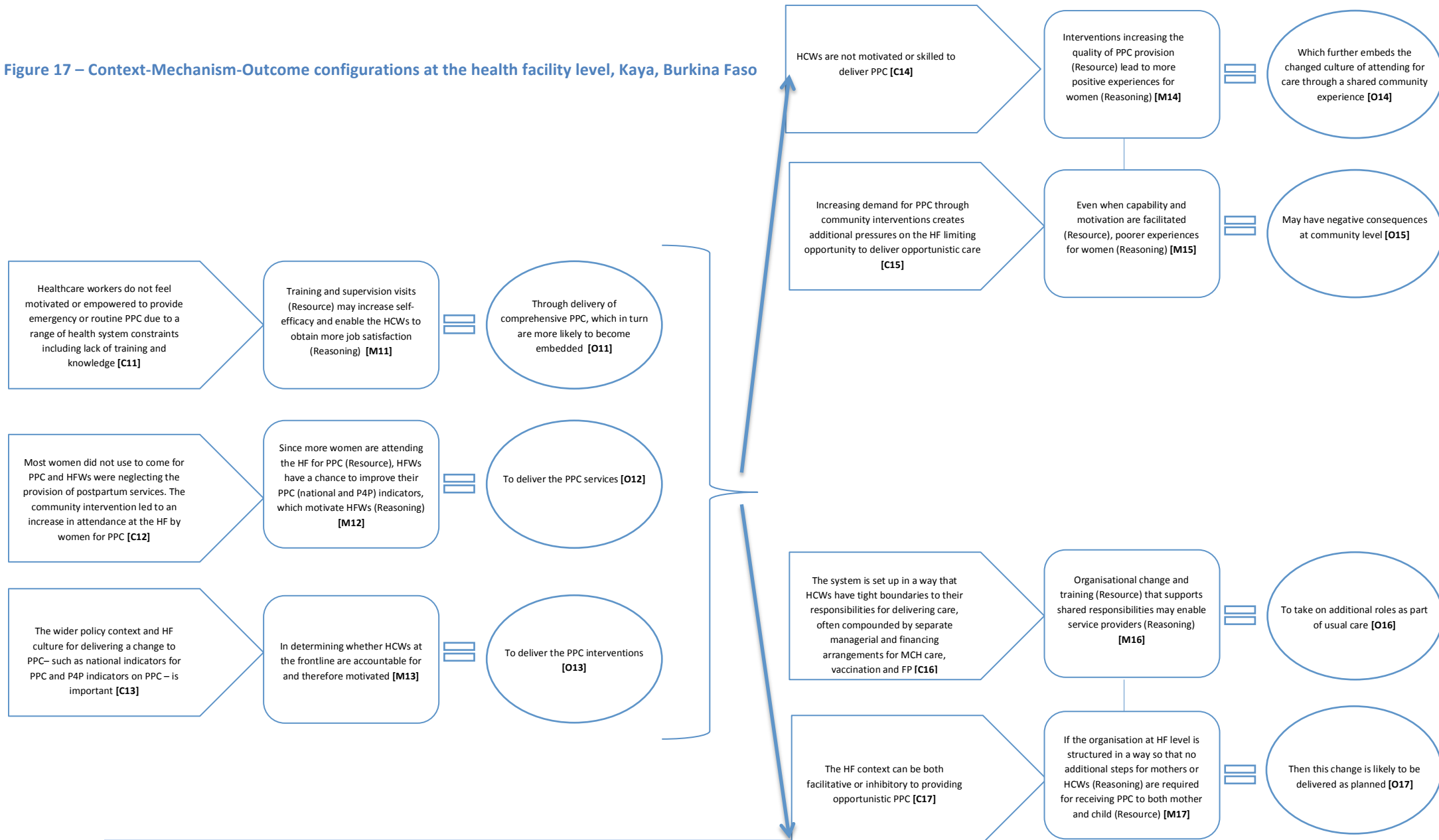
Although relatively well accepted by women, HFWs encounter difficulties getting women to accept postpartum family planning. A minority of women do not understand the need for PPFP, as they do not believe they could get pregnant so soon after delivery. But the main barrier to provision of family planning remains the husbands. Indeed, interviews with HFWs and women revealed that most women would not accept PPFP without the approval of their husband, which can be very difficult to obtain since men are usually opposed to family planning. Several HFWs recounted that a lot of women get family planning in secret and those who get caught will come back to get the FP method removed. In some instances, the husband himself would show up to the HF to complain, which would give the HFW the opportunity to sensitise him.

“There is one woman here at the moment, she wants to remove it. She just had the Jadelle implant placed a couple of weeks ago. She was pressured at home she wants to remove it. I tried to tell her to bring her husband. (...) I tried to tell her to go see the CHW so he can contact her husband to come to the HF and we could talk. In this case, she said her husband was hell-bent that if she doesn’t remove it she couldn’t come back home. So I have to remove it so she can reunite with her children.” (HFW₇, rural area)

“When this woman came in to get ‘depo’ [Depo-Provera] she told me her husband didn’t accept but she still came to get ‘depo’. She went home and unfortunately the husband found the booklet (...). The husband took his motorcycle to come ask me about it. ‘The woman came for ‘depo’, I can’t know what happens between you two’ and the man said that for sure she would get beaten up that night. I tried to negotiate and negotiate, the guy said no, he’s an intellectual, he’s a teacher.” (HFW₁₀, urban area)

In conclusion, the HF context can be both facilitative and inhibitory to providing opportunistic PPC (Context 17). If the organisation at the HF level is structured in a way that no additional steps for mothers or HFWs (Reasoning 17) are required for receiving PPC to both mother and child (Resource 17), then this change is likely to be delivered as planned (Outcome 17). Figure 17 below, summarises the CMO configurations network that are taking place in the HF, which eventually lead to HFWs implementing, or not, the PPC interventions.

Figure 17 – Context-Mechanism-Outcome configurations at the health facility level, Kaya, Burkina Faso



3.6 Conclusions on implementation of MOMI in Burkina Faso

Below, we summarise the findings of the MOMI implementation in Burkina Faso and the factors that have an impact on MOMI's objectives: increasing the demand for and improving the provision of PPC.

Overall the interventions in Burkina Faso achieved improvement in the delivery and uptake in of postpartum care that are likely to be sustained beyond MOMI. In particular the evaluation demonstrated the following: see box. The relative successes in this setting were related to strong links between research infrastructure and the implementing partners, concurrent facilitatory mechanisms such as postpartum care indicators in the P4P and a strong implementation team.

Degree of MOMI implementation in Burkina Faso:

- Relatively long implementation period (activities carried out over 24 months) and planned implementation activities were mostly carried out in time.
- All AVs received training from MOMI IRSS and yearly refreshers were organised for new HFWs.
- Quarterly supervisions by MOMI IRSS were conducted in the HFs and in the villages to support HFWs and AVs.
- HFWs and AVs had a clear understanding of their role in PPC delivery.
- Interventions in the community had a great impact on women, women are now aware of the PPC visits schedule and many are now attending the HF for routine PPC.

Factors influencing demand from women for PPC:

- High retention rate of AVs and high implementation of their activities lead to an increase in women attending the HF for PPC.
- Community activities were supported by community leaders, which facilitated acceptability of the intervention in the community.
- Husbands constitute the main barrier to uptake of postpartum family planning during PPC visits.
- Women in the community influenced each other in attending the HF for PPC by sharing their positive experience around PPC in their social circles.
- Women face significant geographical, socio-cultural and financial barriers to attend the HF.
- Most HFs keep the infant health booklet after delivery to incentivise women to come back for the day 6 routine PPC visit.

Factors influencing provision of PPC by HFWs:

- Trainings and supervisions were well received by HFWs.
- But an important motivator remains improving the PPC national indicators bought by the Pay-for-Performance payment system piloted in Kaya district.
- Most women attending the HF for day 6 and day 42 PPC routine visits are seen by a HFW, especially if the visit falls into the range of days supported by the Pay-for-Performance system.
- HFWs have a high amount of registers to fill out taking up most of their time, which results in little interactions with mothers and long waiting times.
- HFWs had difficulties integrating maternal and infant services, therefore women might get referred from the dispensary to the maternity but services are not physically integrated.

Chapter 4 – Kwale County, Kenya

4.1 Interventions Implemented in Matuga Sub-County, Kwale County

In Matuga sub-county, two interventions were chosen and implemented across 10 health facilities (HFs) and 12 community units (each community unit comprises around 1,000 households):

- Intervention 1: Strengthening immediate PPC for mother and newborn by upgrading knowledge and skills of facility and community based health workers
- Intervention 2: Increase knowledge on and uptake of PPFP during the first year after delivery using the dialogue model at community and facility level.

Intervention 1 aimed to strengthen immediate postpartum care for mother and newborn by upgrading knowledge and skills on detection and management of common maternal and neonatal complications and promotion of early breastfeeding. HFWs received an initial training followed by supervision visits from MOMI ICRH-K and new staff were later sensitised on postpartum care. CHWs also received an initial training to promote health facility based deliveries in the community and raise awareness on postpartum danger signs via health talks in the community and during home visits to postpartum women. CHWs were supervised by existing government Community Health Extension Workers (CHEWs) and the HFWs they worked with. The only incentive provided to CHWs was the introduction of Village Saving and Loans Associations (VSLA) that we will discuss further later on.

Intervention 2 focused on increasing knowledge on and uptake of PPFP via health education sessions at the HF and in the community using a community dialogue model. The initial training directed at HFWs and CHWs included PPFP. Supervision visits provided by MOMI ICRH-K for HFWs and by CHEWs for CHWs also included intervention 2.

4.2 General Context of Implementation

Baseline studies conducted by the MOMI consortium shed light on the implementation context in Kwale and Kenya and has been described in detail in previous work packages (WP 2, WP3, and WP 4). The table below summarises the main findings.

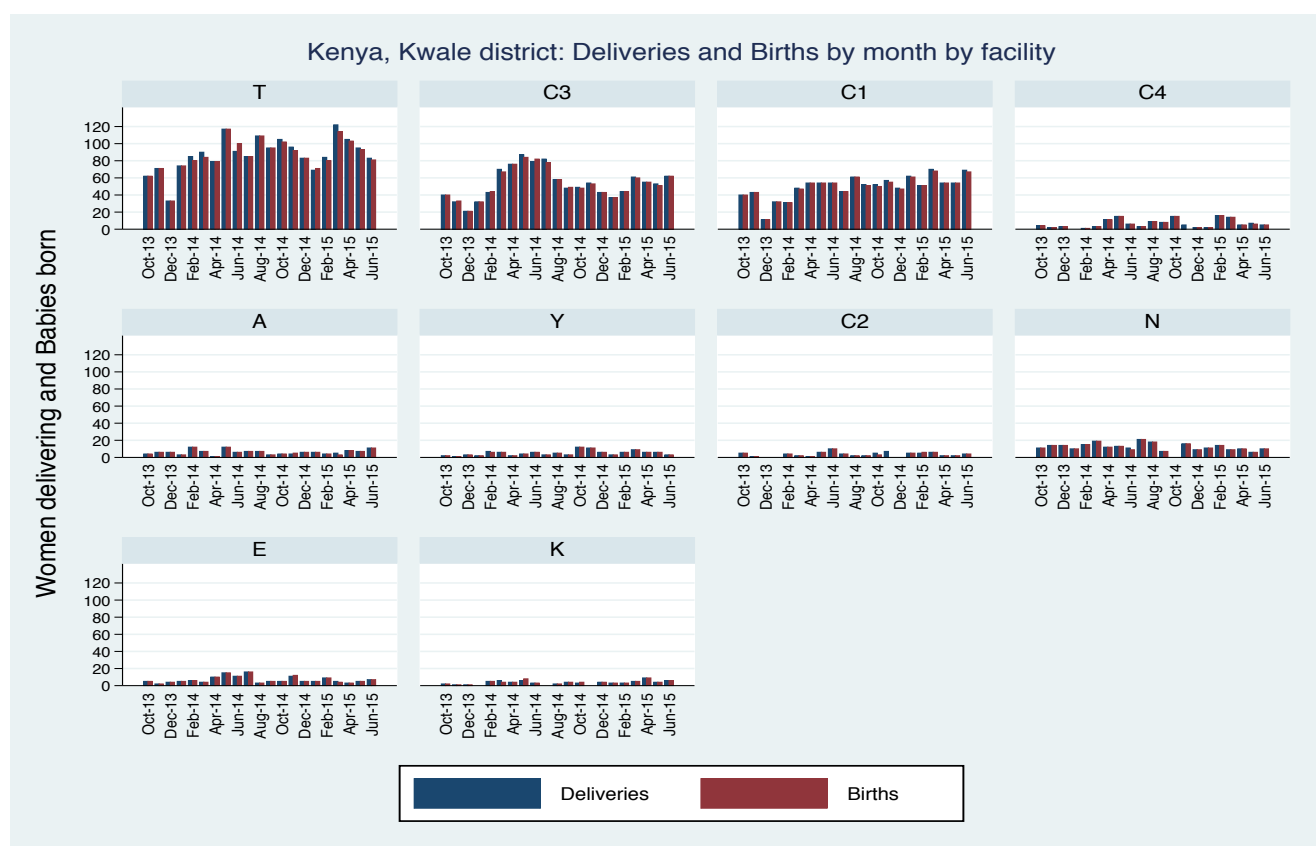
Table 7 – Contextual factors identified in baseline studies in Kenya

Contextual Factors National/District level	<ul style="list-style-type: none"> - Very comprehensive national policies on postpartum care - National policies in line with international guidelines - Poor implementation of national policies on postpartum care - Poor referral system - Lack of adequate funding - Only 42.1% received postpartum care within 48 hours - Lack of district supervision visits - Weak Health information system
Contextual Factors Health facility level	<ul style="list-style-type: none"> - Poor infrastructure - Lack of human resources - Lack of skilled HFWs - High turnover of staff - High workload - PPC not given the same priority as antenatal and childbirth care - Poor attitude of HFWs
Contextual Factors Community level	<ul style="list-style-type: none"> - Limited geographic accessibility to the HF/Lack of transportation - High out-of-pocket payments - Poor health worker attitude - Low uptake of FP - High number of home deliveries - Cultural beliefs and practices preventing women to attend the HF after delivery - Male dominance in health-related decision making - Poverty and low education level

The HFs studied in the case studies greatly varied in size and resources. For example, some of the HFs have a catchment area three times larger than the small HFs studied. The smaller HFs have only two nurses on staff and are not opened 24h/7 and therefore do not provide services in the evenings and weekends. Nevertheless, all HFs are organised in a similar way with an outpatient department and a maternity ward. All maternal and child services are provided by the same staff at the maternity, therefore mothers and their children only have to queue in one place where they can receive all MCH services.

Figure 18 shows the number of deliveries and births in each of the facilities in Matuga constituency. At round 80-120 T (facilities are anonymised) has the most. Two of the case study facilities, C3 and C1 health centres, have quite a lot – around 40 to 60 per month, and all of the other facilities, which are dispensaries – have very few, typically only 5-15 per month.

Figure 18 – Deliveries in each facility in Matuga constituency, Kwale County, Kenya



4.3 Implementation Strength of interventions

In Kenya there were considerable changes to programme implementation throughout the length of the project (Figure 19). For instance, although VSLAs were not part of the original implementation plan, it was implemented by MOMI in 4 community units (CU) starting in January 2015 with approximately 24 members per group and a very good retention rate. By the end of January 2016 all CUs received VLSA training, however, this training was given very late in the project; for example 2 CUs in December 2015, 3 CUs in January 2016 (see Appendix 2 for detailed timeline). VSLAs were set up as a mechanism to incentivise the CHWs and came into effect through suggestions from the PAB. The primary objective of the VSLA intervention was to ensure sustainability of the CHW groups. Orientation on VSLA members was done in October 2014.

By January 2015, it was decided that the dialogue model would be discontinued in the health facilities because it was not practical and feasible to arrange these sessions at the facility level. Death reviews for mothers and newborns were planned to be conducted in

2015, but did not happen for logistical reasons. The project was meant to facilitate the meetings from mid-2015 but the district committee failed to follow through.

Considering the dosage of the planned interventions, trainings were conducted as planned and 547 CHWs were trained in dialogue model, although there was poor retention later on in the project. The intervention had a large 'dose' at the beginning of the intervention and subsequent refresher trainings were sporadic. Dialogue model was introduced in 12 community units. Activities were implemented as per scheduled plan. Interventions started around July/September 2013 and lasted a period of 24 months. Dialogue sessions were held in health facilities in January 2014. Additionally, 2 picture books were provided in all the 10 health facilities and 300 picture cards were distributed among CHWs.

It is assumed that the dialogue model would lead to increased knowledge and uptake of PPFP during the first year after delivery. The process pathway on how this will be achieved is however, lacking in clarity. There seems to be considerable overlap between health education provided by the CHWs and the dialogues sessions suggested by MOMI. The difference between the two approaches and the purpose that they each serve needs clarification. Although, interventions were developed to be context specific by the stakeholders, some of the activities (e.g. the use of the dialogue model in health facilities) had to be withdrawn. Intervention fidelity scored a 1 because it could not achieve the objective of community engagement. The intervention was focussed on the CHWs rather than on communities with some underlying assumptions that was not made explicit in the programme documents. A summary of the implementation strength is outlined in Section 7.1.1.

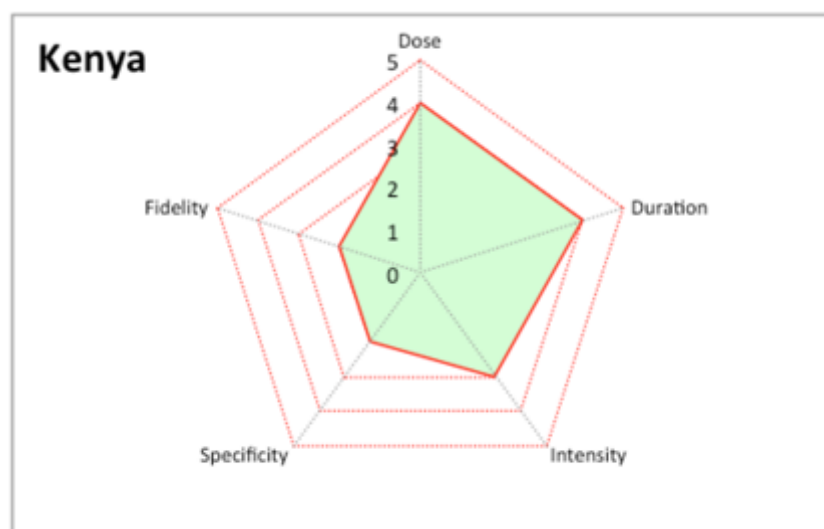


Figure 19 – Implementation strength in Matuga constituency, Kenya

4.4 Strengthening Immediate PPC for Mother and Newborn

4.4.1 Activities and Motivations of CHWs

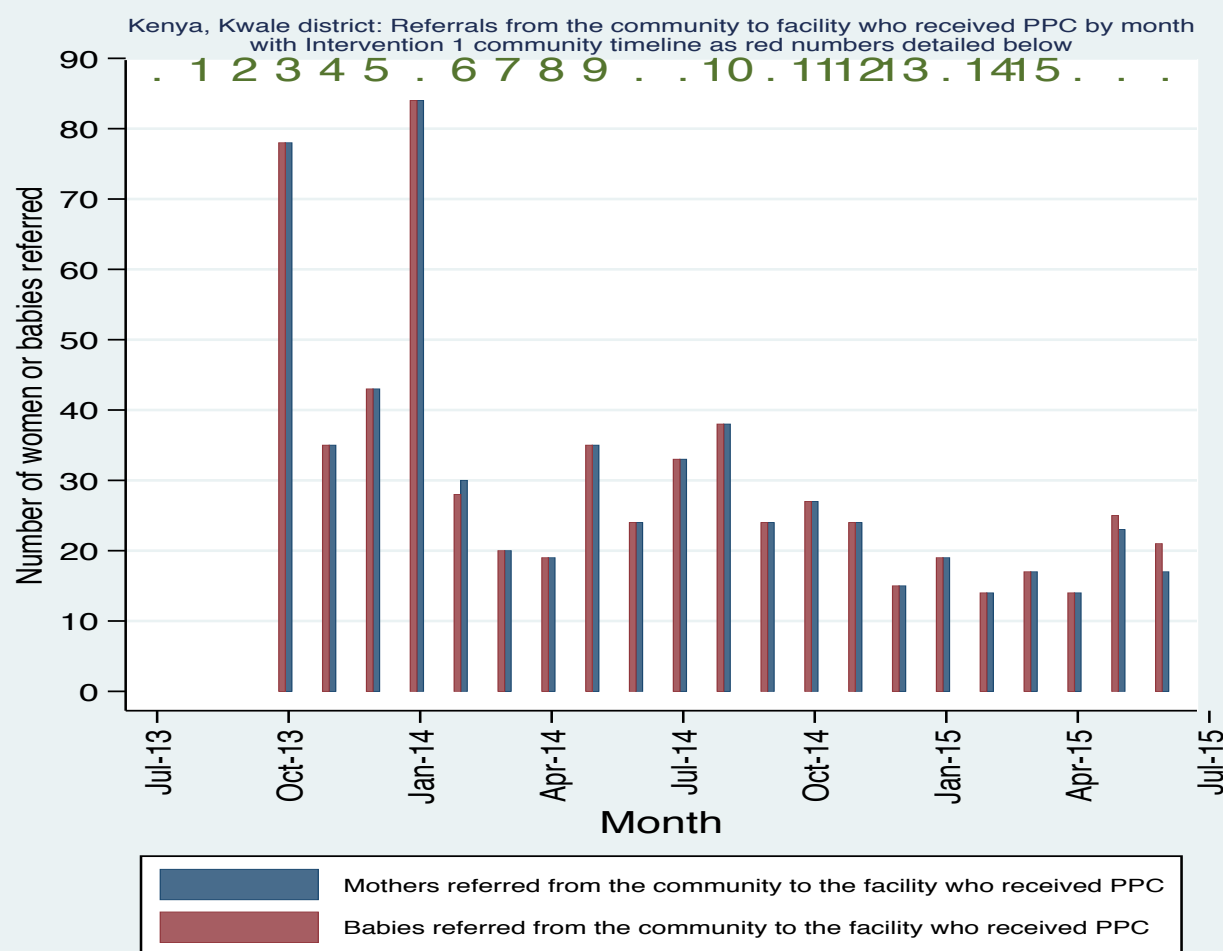
MOMI ICRH-K trained 547 CHWs to provide home visits to postpartum mothers in the community and conduct community dialogues around family planning. However, the retention rate of the CHWs was low during the implementation period, as only about half of the CHWs trained remained active through the project. Several CHWs interviewed commented that they were the only ones left working in their community. One interviewee explained that those CHWs stopped their activities due to lack of pay. Yet all CHWs were aware of the voluntary nature of the position but some were hoping that it would evolve into a paid position and attended training because fare and lunches were provided. A minority of CHWs, generally those with longer work experience, reduced or stopped their activities in the community as they found paid employment at the HF where they provide assistance with daily activities and are even referred to as 'HF-based CHWs'. Unfortunately, when CHWs stop their activities in the community, no one takes over their assigned 20 households, creating gaps in the implementation of intervention 1 in the community.

"The challenges do come with the voluntarism when it comes to doing the work of community health workers. They are called community health volunteers and they have to volunteer. And whenever there is work for them to do anywhere else, because they have to fend for their families, so whenever they get work somewhere else they tend to leave the work that is attached to the hospital. And so there is a lot of attrition, so there is a fallout of these very important people at the community level. So we really need to train and train them again and again and again because most at times we get new members coming in. That's the biggest challenge we have." (Policymaker 2)

Several CHWs interviewed acknowledged that they have not conducted a home visit and/or a community dialogue in the couple of months before the interview. The sample of women interviewed reflects this too as half of the women interviewed mentioned that they have never been visited by a CHW and never attended a community dialogue. Therefore for these women, the HF continues to be their only source of information on PPC. On the other hand, some CHWs interviewed remained active throughout the project and kept conducting home visits and community dialogues to promote HF-based deliveries, attendance at the HF for immediate PPC, exclusive breastfeeding and infant vaccinations and monitoring. In addition, active CHWs referred women and babies to the HF for PPC. CHWs interviewed asserted that since the beginning of their activities, they observed a decrease in home deliveries and postpartum complications.

Figure 20 shows the number of women who were referred from the community to the facility for PPC by month for all 12 of the facilities in Matuga constituency, with the timeline of key MOMI intervention 1 activities numbered across the top (see key at bottom of figure for explanation). There are two spikes: one in October 2013, the first month that this data was recorded and when community dialogue sessions took place, and another in January 2014 that does not appear to correspond to any specific MOMI intervention activity. Towards June 2015 the numbers of recorded referrals reduces suggesting a limited or absent impact of MOMI intervention 1 activities on this indicator.

Figure 20 – Referrals from the community to the facility who received PPC by month, Matuga, Kenya



- 1 = Aug–Sep 2013: 546 CHWs trained/sensitized on PPC with emphasis on PP visits and referral for PPC within 48h. Certificates and name tags given to all participants
- 2 = 29 Aug 2013: Sensitization meeting for CHWs in Matuga CU on the reproductive health issues especially to inform CHWs to register all women in postpartum period and accompany them to the health facility. Event organized by the Matuga dispensary
- 3 = 19 Sept 2013: Dialogue session on need for skilled delivery at health facilities conducted for a village in which the majority of deliveries are home deliveries (organised at Magodzoni dispensary)
- 4 = 10 Oct 2013: Community dialogue on different reproductive health issues at Vyokuta CU. Event organized by CHEW from Vyogwani dispensary
- 5 = 14 Nov 2013: TBAs/CHWs/Matuga staff – meeting with TBAs at Matuga dispensary to discuss ways to strengthen skilled delivery at health facility and postpartum care. High numbers of home delivery continue to be recorded
- 6 = 27 Nov 2013: Meeting to give feedback to the Vyokuta CU members on reproductive health issues especially on identification of postpartum mothers and refer them to the health facility. Meeting organized by the facility linked with Vyokuta CU and the CHEW
- 7 = 28 Nov 2013: Mentorship visit to CHEWs on community dialogue sessions
- 8 = Dec 2013: Start implementation strengthening PPC at community level intervention
- 9 = 14 Feb 2014: Supervision and mentorship by MOMI staff (together with district health staff) when they supervise the health facilities (see supervision visits mentioned under "health facility component")
- 10 = 25 Apr 2014: Distribute pictures for dialogue model sessions on PPC and FP to Magodzoni dispensary and Simkumbe CU, Mazumalume dispensary and Mazumalume CU and Vyogwani dispensary and the Vyokuta CU
- 11 = 2 May 2014: MOMI staff (Eunice) attended a meeting for CHWs at Matuga dispensary. Difficulties of referral to health facility/hospital to avoid home deliveries and ensure skilled deliveries discussed
- 12 = 4–11 Aug 2014: A new CU, Mkooyo CU linked to Tiwi health centre, with 50 CHWs and 15 community health committee members (these are special selected community members to be the link between community and health facility) trained as per the national guidelines for CORPs (Community Own Resource Persons) training. (Training on strengthening of immediate PPC included, training on dialogue model for uptake of PFFP not included in this training session)
- 13 = 21 Aug 2014: Meeting (Eunice) with 15 TBAs at Magodzoni health facility (HF) to strengthen referrals by the TBAs for skilled deliveries in health facilities
- 14 = 27 Aug 2014: Meeting (Eunice) with 13 CHWs in Mazumalume HF to increase their knowledge on early signs of labour to address issues related to deliveries occurring before arrival at the health facility
- 15 = 22–23 Oct 2014: Sensitization conducted by Eunice on Village Saving and Loans Associations (VSLA) done at Simkumbe and Mazumalume CUs. Capacity building on VSLA to CHWs will help to keep them together and focus on MOMI interventions beyond the end of the project
- 16 = 22–23 Oct 2014: Two page picture cards (to be used as support material during home visits and health education sessions) distributed in seven health facilities to be distributed among the CHWs of the CUs attached to these health facilities (±30 cards per CU - in total 320 picture cards printed for distribution)
- 17 = 29–30 Oct 2014: Sensitization conducted by Eunice on VSLA done at Vyokuta and Matamazide CUs. Capacity building on VSLA to CHWs will help to keep them together and focus on MOMI interventions beyond the end of the project
- 18 = 13–16 Nov 2014: Training on VSLA at Simkumbe CU. As part of the training, a group constitution is developed and highlights continued focus on MOMI interventions during their weekly meetings
- 19 = 9–12 Dec 2014: VSLA training of Mazumalume CU
- 20 = 15–18 Dec 2014: Supportive supervision visit conducted by Eunice to Simkumbe CU and Mazumalume CU. VSLA training in Ng'ombeni, Matamazide CU, M&E
- 21 = 18–21 Feb 2015: VSLA training of Matuga CU. As part of the training, a group constitution is developed and highlights continued focus on MOMI interventions during their weekly meetings
- 22 = 12 Mar 2015: A mentorship visit to CHWs at Matuga CU. The proper use of the one page laminated pictures for PPC was revised (Eunice)
- 23 = 27 Mar 2015: Distribution of A3 size picture booklets for uptake of PPC services to all CHEWs and health facilities by Eunice

From the interviews collected in the community, it seems that implementation of intervention 1 in the community was sporadic and dependent on the motivation of CHWs to conduct their activities. To boost their motivation, CHWs were provided with training, supervisions and a pictorial guide to engage with women but did not receive any incentives besides the creation of the VSLA.

A few CHWs interviewed did not actually receive the initial training organised by MOMI ICRH-K as they joined the scheme after MOMI initial training. Those who did attend said the training was very helpful as they learnt a lot but still would have liked to receive more training.

“The trainings have helped me a lot and I would want more. There is no limit to education and it is dynamic day by day. It would be better if we received trainings regularly.” (CHW₁)

Since it was not feasible for MOMI ICRH-K to conduct supervision visits in the 12 community units, CHWs’ supervision was the responsibility of the CHEWs who are formal trained health workers based at the health facility with the specific task to support and supervise the CHWs. CHWs interviewed are appreciative of the few supervisions they received but asked for more regular visits and more support from the CHEWs.

“They come to the facility and check our files. They don't visit the households. (...) I think [the supervisions] are inadequate. They should at least get to go around the community with us and get to experience some of the challenges first hand and see what we are doing right and tell us what we need to improve on.” (CHW₂)

“However, having said that within the community where we have the community units we still can do a lot with our CHEWs. (...) As it is whether it's the workload or nature of the work, they are more of facility based. They don't really go out there to the community, to the villages to meet the mothers. And if we can put a little support it can do a lot of good.” (Participatory Evaluation Workshop participant)

Pictorial guides were provided to CHWs to help them engage women in the community. This proved successful as interviewees explained it helped get their message across because it is easier for women to learn and remember by seeing the images.

“You may show the illustration of a mother who is bleeding and the participants would be able to remember that someone else had also died due to such bleeding. In the past, there were a lot of deaths due to excessive bleeding or placenta retention after childbirth, but now they see the need to go to the health facility on time. (...) The diagrams give them a mental

picture to associate with their own experiences in the village. They help them to remember.” (CHW₂)

Finally, MOMI ICRH-K introduced VSLAs as an incentive for CHWs to help them continue their activities without remuneration. In their weekly meetings for VSLA, CHWs were to discuss their savings, but these meetings were also to be used as a platform for CHWs to discuss health issues in the community and



VSLA meeting – April 2015

implementation of MOMI activities. However, implementation started in late 2014 and focused only on 4 community units at the time of the end-evaluation, three of them being outside of the scope of the case studies. Therefore the data is too limited to understand the impact of VSLA on CHWs' motivation. The couple of CHWs interviewed that were concerned by the VSLA expressed gratitude as it helped them save a large amount of money (sometimes over 3000€).

“We are grateful to MOMI for starting VSLA. We would have been far had it began like three years earlier. The CHWs here are now more comfortable we can now get money and return it. We started by saving small amounts and now we can't believe we can now get such amounts.” (CHW₃)

Generally, across all case studies, CHWs explained that they would like more incentives, to help them in their daily activities (for example, bike, material for referrals, raincoats) and to value their commitment.

“Volunteer work is not easy, it requires sacrifice. I only ask for sponsorship from organizations to enable us as CHWs to get something to take back home. After a long day out the wife always looks at you wondering what you brought home. It's quite hard but because I accepted it, that's why I continue doing it.” (CHW₄)

The main driver for the CHWs' motivation remains the duty to serve their community since they were chosen to do the job. A few mentioned that their motivation is to provide the right information to women to ensure they have healthy lives and children. Some

mentioned they gained knowledge and respect of their community. The majority explained that they have to keep on going for the wellbeing of their community.

"I want to take care of my community and see them get quality health services. To see them carry on with their lives successfully." (CHW₂)

"I enjoy serving my community and being involved in community activities. I enjoy interacting with people and getting new knowledge." (CHW₅)

"These are my people and I want the best for them. If I don't do [my work] they'll perish." (CHW₄)

"I will continue, but.... (sighs) you know the community will now be used to me doing my work and it will be a disservice to them and me if I stop. If bad things are happening in the community it will also affect me. I will just have to continue." (CHW₆)

"During one of the sessions one CHW stated he does not feel motivated anymore to continue his work as CHW without being paid. Although most of the other CHWs present in the meeting disagreed with this. They found their function in their community very needed and rewarding even without being paid for it. They indicated to be motivated to continue their work even without being paid for it." (Field visit report – January 2015)

CHWs further stated that their activities are well received in their communities and that women do listen to their recommendations because they are trusted members of the same community. As such, CHWs feel that they are the link between their community and the HF.

"[The community] receives us well since we do meet frequently and they involve us in their daily chores. They did elect the CHWs to represent them in the community." – "Every facility has CHWs that act as the link to the community. We are like the bridge. If there are complaints concerning a facility, then I get to sit down with them and discuss the way forward. It may be positive or negative issues from both sides." (CHW₂)

"These are people that I meet every day and they know me. I will explain the dangers of such complications and then refer them to the hospital immediately." (CHW₅)

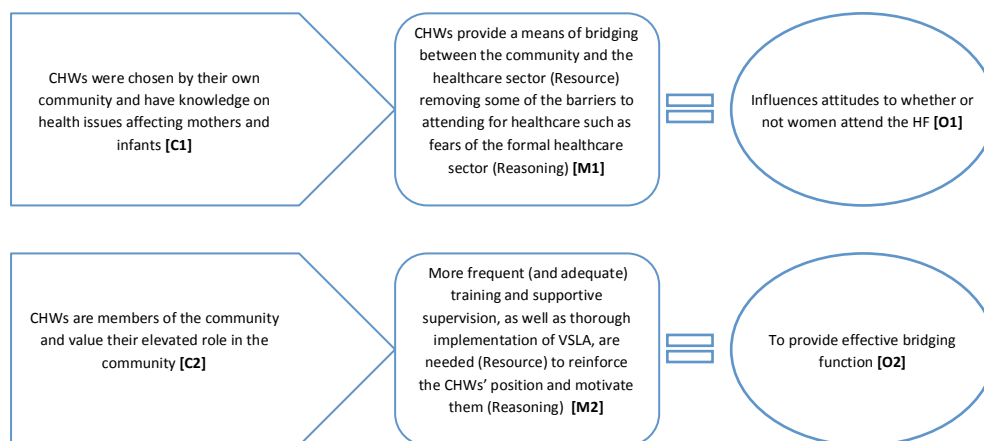
"Women are glad [about home visits]. Some are not capable of expressing themselves at the hospital and wouldn't even know where to begin since they get to meet other people with varying ailments and they are scared. They ask for our opinions on what to do." (CHW₇)

“We are like the bridge linking the community to the health facility. If we are not there, they will not have any one sensitizing them on health matters. We act like ambassadors passing information back and forth.” (CHW₈)

It is difficult to get women’s perspective on the work of the CHWs because, as mentioned earlier, half of the women interviewed never received home visits or attended a community meeting. Women interviewed that do have active CHWs in their village, expressed that CHWs are important and are seen as a reliable source of information.

“They explain in details to enable one to understand issues.” (Woman₁)

Consequently, CHWs were chosen by their own community and have knowledge on health issues affecting mothers and infants (Context 1). Therefore, CHWs provide a means of bridging between the community and the healthcare sector (Resource 1) removing some of the barriers to attending for healthcare such as fears of the formal healthcare sector (Reasoning 1), influencing in turn attitudes to whether or not women attend the HF (Outcome 2). Additionally, CHWs are members of the community who value their elevated role in the community (Context 2). However, more frequent – and adequate – training and supportive supervision, as well as thorough implementation of VSLA, are needed (Resource 2) to reinforce the CHWs’ position and motivate them (Reasoning 2) to provide effective bridging function (Outcome 2).



4.4.2 Provision of immediate PPC at the health facility

The training of HFWs focused on immediate PPC. The HFWs interviewed who received the training seem to know the danger signs they need to look for immediately after delivery although some would have preferred to have more practical trainings. The training brought focus on immediate PPC, an area neglected before implementation, but not all HFWs in the case studies have received the training. Therefore, some MOMI-trained HFWs explained that not all colleagues are competent to provide PPC and they have to help them even in minor cases.

“Yah there was a training that was undertaken by, by ----- (struggling to remember) using the MOMI project. That is the training which made most of the health care workers have a focus on this because in that training that is when I realized we lose mothers to the community because of this ignorance, that the mother delivers at home and there is no any ----- (pause) the mother stays at home and does not come to the facility for check-up and within some few days you can have mothers suffering from sepsis or post-partum haemorrhage because this mother did not come to the facility and has not received any check-up.” (HFW₁)

“If someone consults even on tiny things over and over again, over and over again, you come and realize that this person has some difficulties in dealing with these things. So I can say not everyone is competent in handling postpartum and even maternal cases, yes.” (HFW₂)

In several cases the interviewees brought up a lack of training for the new staff or the ones that did not attend the MOMI training. As a result, the responsibility for delivering PPC falls mainly on those who received the initial training, as the trainees did not relay what they learnt to their colleagues. One HFW interviewed explained for example that she only knows about PPC from her college education – she has not received training on PPC since – and does not know about any PPC guidelines. When serving the HF alone, she does not feel confident dealing with complications and as she cannot ask for help she usually refers the patient to a higher level HF.

“We have been supported through trainings. But as service providers we also have bad attitudes. When one of us goes for training we tend to let them handle the bulk of the work because we feel they are more empowered than the rest of us. (...) Some organisations nowadays do on-job training and we all get to be recognized and all feel part of the whole process.” (HFW₃)

"I can manage [complications], but when the situation arises when one is alone, one begins to doubt if they will be able to manage the situation."
(HFW₄)

Supervision visits from MOMI ICRH-K were conducted to support HFWs implementing intervention 1. HFWs interviewed provided feedback on the visits but did not expand on how it may have motivated them or helped them in providing immediate PPC.

"[The supervision] was very bad. (...) There were a lot of issues in my work and I had not been up-to-date since I was still fresh from college. There were some questions that I could not answer; even though there were some questions that I felt should have not been directed at me but at the in-charge." (HFW₄)

Furthermore, several HFWs had concerns on who will take over the MOMI supervisions at the end of the project since supervisions conducted by the district team have little focus on postpartum care.

A set of postpartum guidelines was provided to the HFs to address the lack of guidelines available. Several HFWs, including some who did not receive the MOMI training, mentioned they use them when they are unsure of the procedure to follow.

"There is a day a mother had foetal distress but we were not sure. We had to refer to the book. Another also came bleeding and we did the same to be sure of what we are doing. We may find that it's not what we think it is."
(HFW₅)

Observations and testimonies of HFWs across case studies tend to show that the provision of immediate PPC within 48 hours of delivery (72 hours for women who delivered at home) has become part of the HFWs routine. However, women are not kept for long at the HF after delivery. The larger HFs (opened 24 hours/7 days) keep the women for 12 hours at least according to the HFWs, although women interviewed who delivered in those HFs said they were discharged after 6 hours. In smaller HFs (closed during evenings and weekends) where the number of deliveries is lower due to opening time constraints, women are usually discharged within a couple of hours, which was confirmed by the HFWs. The few hours women spend at the HF after delivery therefore raise questions on the quality and comprehensiveness of the immediate PPC provided.

Figure 21 shows PPC within 48hrs as a proportion of women delivering (numbers of women are shown above bars) per month for all facilities in Matuga constituency combined.

Around 100% or more of women are indicated to get immediate postpartum care, this is perhaps due to the fact that from March 2013 onwards free delivery care was offered by all facilities and this was supposed to also include postpartum care after delivery automatically. It is not clear from the monitoring data how postpartum care was recorded however, especially given the proportions over 100% of women who delivered. It is possible that some of the extra postpartum care was for women who delivered outside the facility (i.e. were not recorded in the denominator). Figure 21 shows an increase in postpartum care coinciding with MOMI intervention 1 activities (numbered at the top of the graph and detailed below it) from October 2013 to August 2014. There is then a decrease in PPC though, and the relationship with MOMI activities is unclear. Figure A7.8 in Appendix 7 shows PPC by facility.

Figure 21 – Postpartum care within 48 hours by month at all facilities in Matuga constituency, Kwale County, Kenya

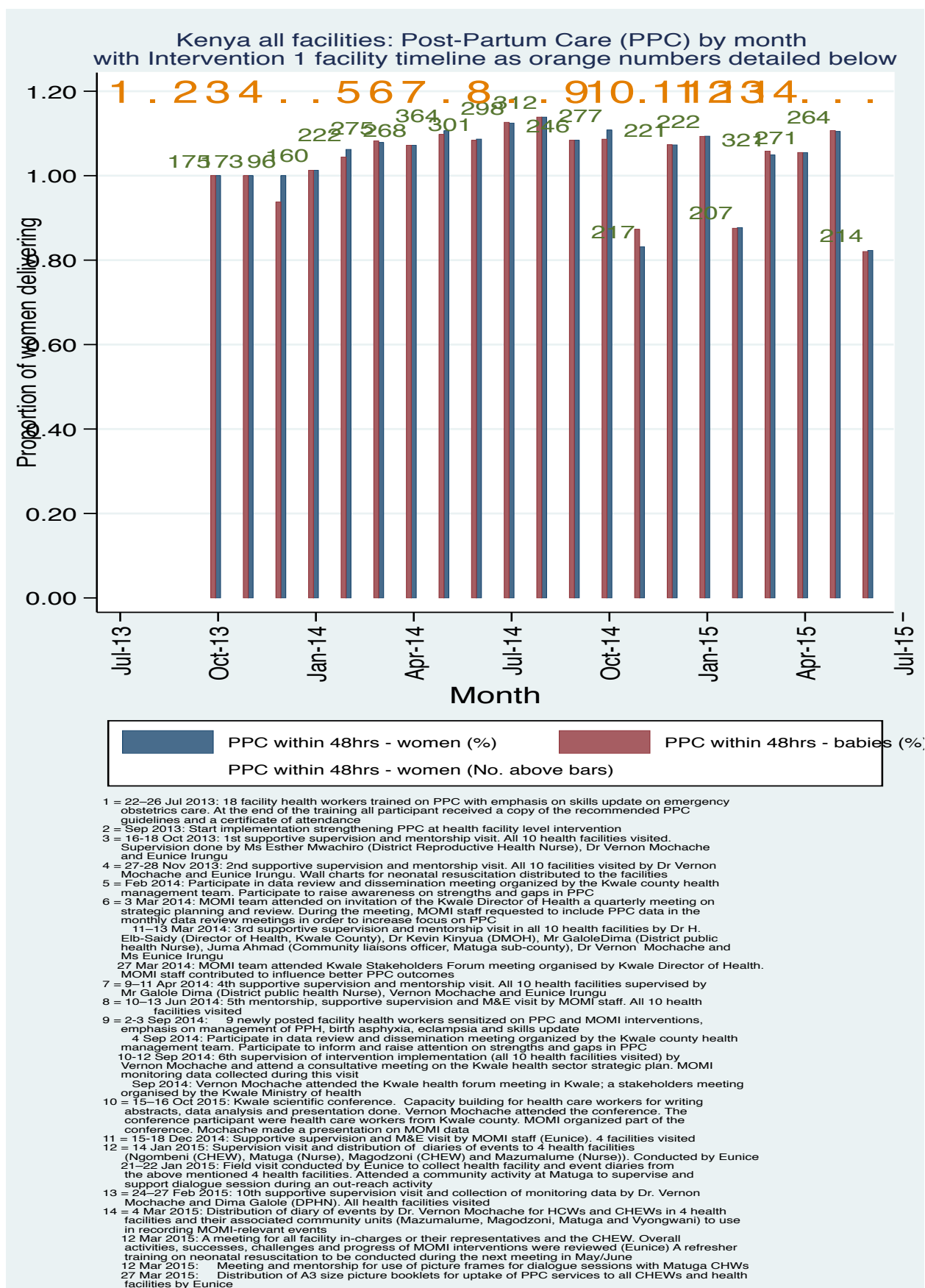


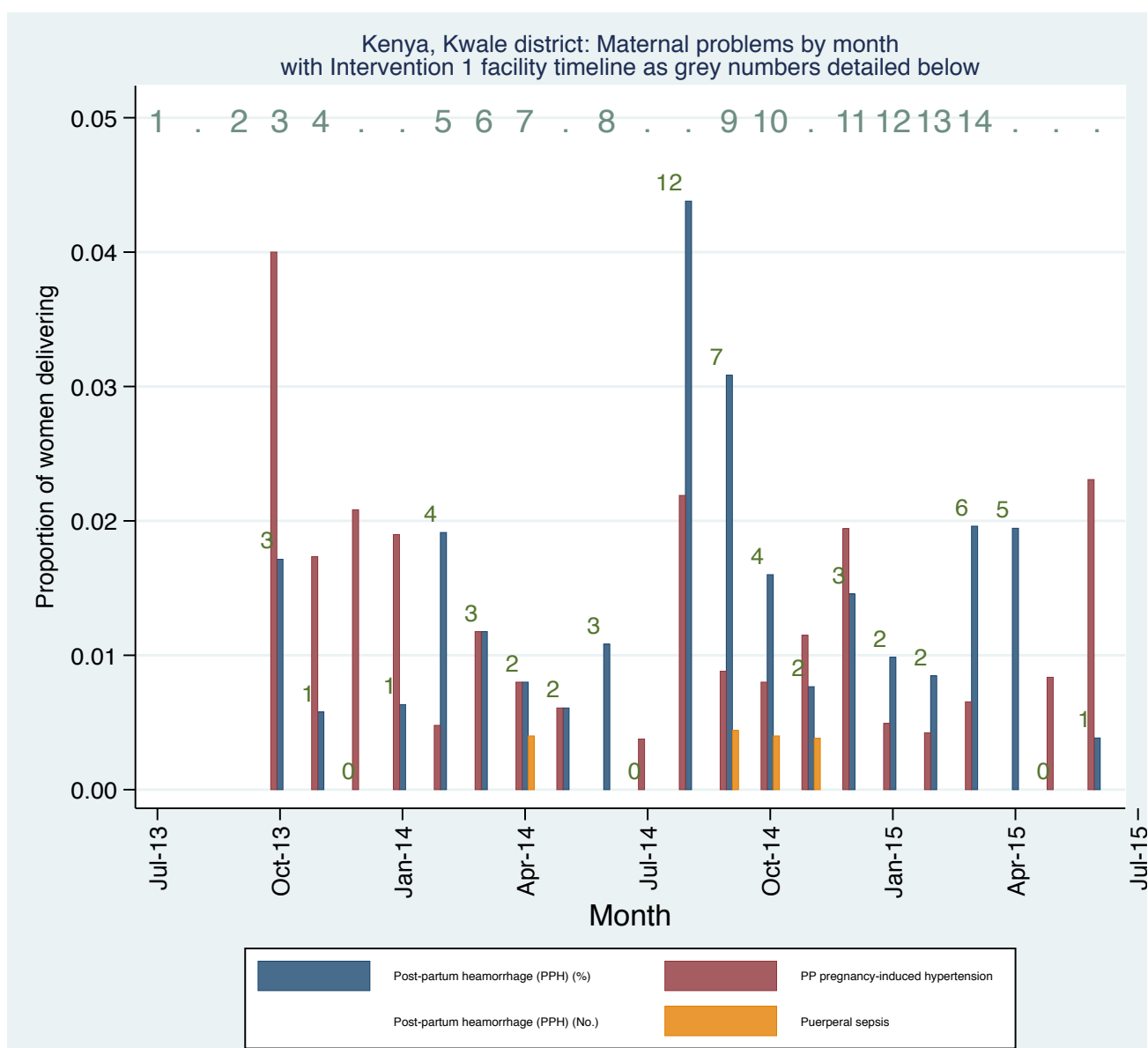
Figure 22 shows maternal complications: post-partum haemorrhage (PPH), pregnancy-induced hypertension and puerperal sepsis. The numbers, and the proportions of women delivering that they represent, are low compared to what might be expected in Kenya and sub-Saharan Africa – for example around 10% of women might be expected to have PPH (Carroli *et al.*, 2008) compared to the 2-4% recorded here. The trend of complications – an initial peak in October 2013 followed by a decline to July 2014 and then another peak in August 2014 followed by a decline – suggests no association with MOMI interventions.

Figure 23 shows neonatal complications: low-birth weight, prematurity, neonatal sepsis, and birth asphyxia. Numbers (and proportions of babies) are again low, and perhaps less than should be expected. There are also no clear trends in relation to the MOMI intervention 1 activities timeline – with fluctuations in the numbers of each complication recorded over the time period.

Figure 24 shows numbers of neonatal and maternal deaths. Again numbers are fairly low, and the two peaks of neonatal deaths in February and November 2014 seem unrelated to MOMI interventions. There were only four maternal deaths recorded: one each in October and December 2013 and two in February 2014; all of these occurred in Kwale district hospital (Appendix Figure A7.11). There were also very few deaths recorded surrounding in the communities surrounding each health facility (Figure 25).

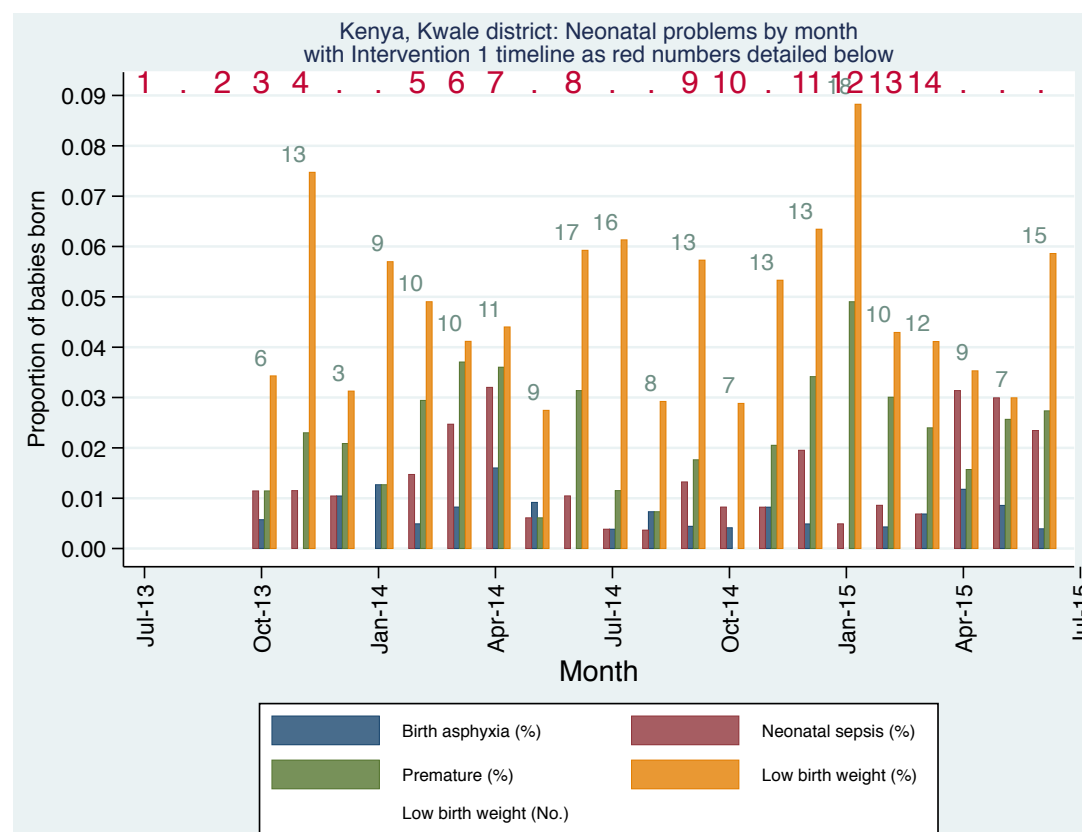
Figures A7.9, A7.10 and A7.11 in Appendix 7 show maternal complications, neonatal complications and maternal and neonatal deaths by facility.

Figure 22 – Maternal complications by month in all facilities combined in Matuga constituency, Kwale County, Kenya



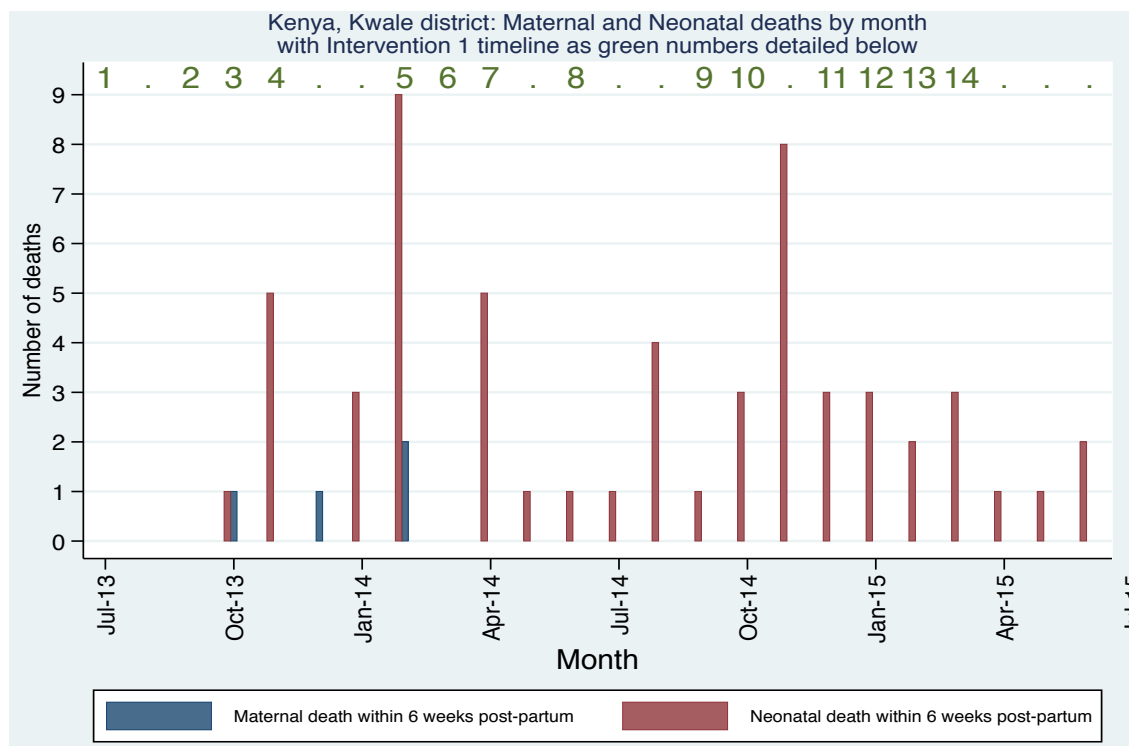
See intervention 1 timeline key at the bottom of Figure 21

Figure 23 – Neonatal complications by month in all facilities combined in Matuga constituency, Kwale County, Kenya



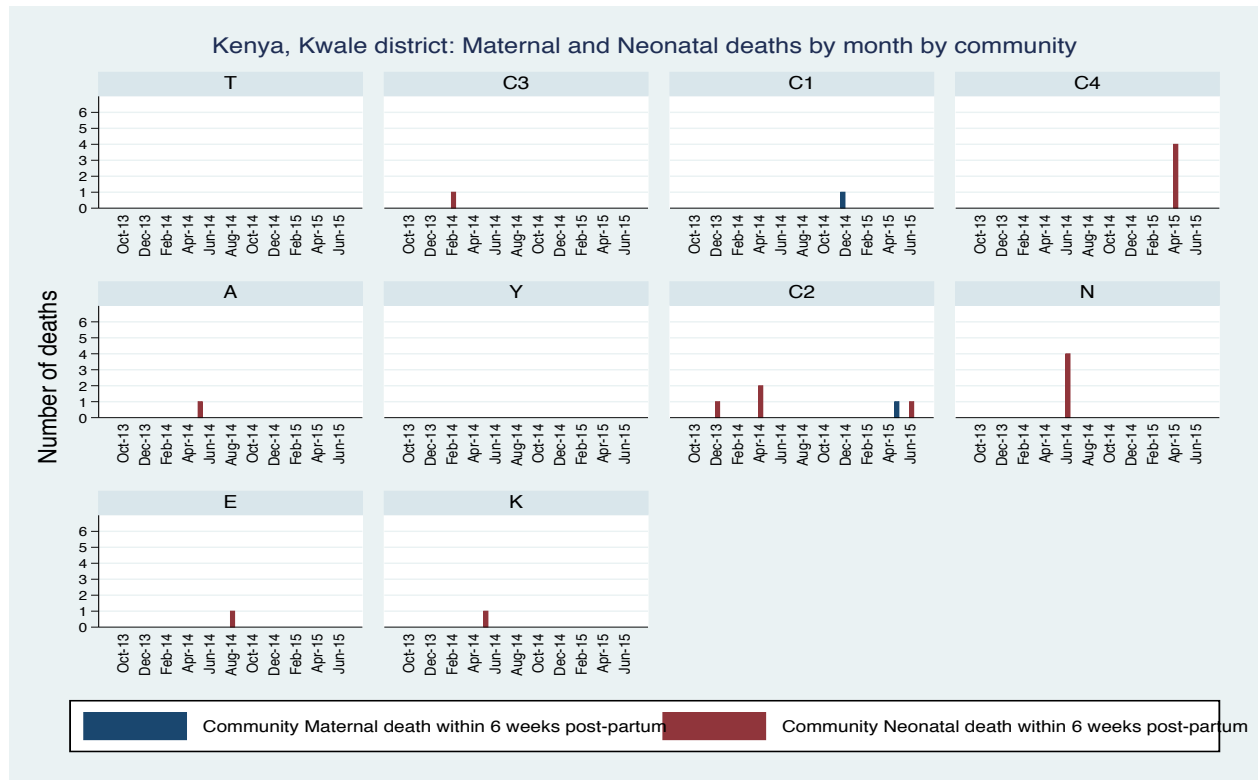
See intervention 1 timeline key at the bottom of Figure 21

Figure 24 – Maternal and Neonatal deaths by month, all facilities combined, Kwale, Kenya



See intervention 1 timeline key at the bottom of Figure 21

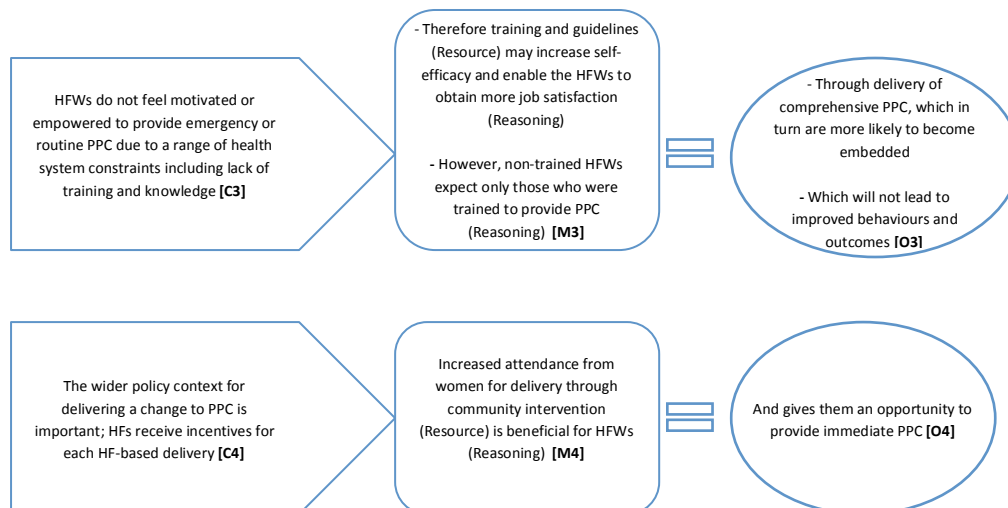
Figure 25 – Maternal and Neonatal deaths by month, by community, Matuga constituency, Kwale County, Kenya



Additionally, HFWs interviewed were aware of their limitations in handling certain complications, were aware of what they could do before referring the patient and knew when and how they have to refer to Kwale district hospital. However, there is no monitoring data available on transfers to Kwale hospital to confirm the HFWs' statements.

On the whole, intervention 1 is in line with national policies on PPC. Additionally, HFWs receive financial incentives for each HF-based delivery, through a government pay-for-performance system, meaning that more women attending the HF through the community component of intervention 1 is beneficial for HFWs as the HF receives 2500 KES (about 22€) per delivery. Health facility delivery also gives them an opportunity to provide immediate PPC; according to observations this focused on: active management of the third stage of labour; management of acute complications; breastfeeding and nutritional counselling; and counselling on family planning. Unsurprisingly, the focus of intervention 1 on immediate PPC did not trigger a focus on routine PPC in the HFWs, especially for the mother. The only change noted during observations was HFWs taking advantage of scheduled clinics for infants to counsel on exclusive breastfeeding and postpartum family planning.

Finally, it was established during the baseline studies that HFWs do not feel motivated or empowered to provide emergency or routine PPC due to a range of health system constraints including lack of training and knowledge (Context 3). Therefore training and guidelines (Resource 3) may increase self-efficacy and enable the HFWs to obtain more job satisfaction (Reasoning 3) through delivery of comprehensive PPC, which in turn are more likely to become embedded (Outcome 3). However, non-trained HFWs expect only those who were trained to provide PPC (Reasoning 3), which will not lead to improved behaviours and outcomes (Outcome 3). Furthermore, the wider policy context for delivering a change to PPC is important; HFs receive incentives for each HF-based delivery (Context 4). Increased attendance from women for delivery through community intervention (Resource 4) is beneficial for HFWs (Reasoning 4) and gives them an opportunity to provide immediate PPC (Outcome 4).



4.4.3 Women's perceptions on immediate PPC

Women – when they have an active CHW in their community – are told about the importance of PPC during home visits. In addition, according to the HFWs and field observations, women are also told during antenatal consultations about the need to deliver at the HF and to come to the HF as soon as possible in case of home delivery to receive a check-up. Some HFWs highlighted that there has been a change in the last couple of years with now more mothers delivering at the HF and coming for immediate PPC when they deliver at home.

“It’s like the community now is aware that even one delivers at home she must go to the facility immediately because anything can happen to that mother. The mother can develop bleeding you never know. So it’s like ----

(pause) it has been a routine nowadays any delivery mother comes within 72 hours despite what, the mother must come to the facility for observation and check-up. So it's like a routine at the facility." (HFW₁)

However, determining if women perceive the importance of PPC proved to be difficult. On one hand, postpartum women interviewed who recently delivered at the HF explained that delivering at the HF is important because TBAs who attend home deliveries are not capable of handling complications unlike HFWs.

"The services are of importance because if you are pregnant and you start to become sick the TBAs who help people to deliver cannot know if you have a problem or not. But if you go to the hospital if there is a problem they will tell you and if there is no problem they will also tell you." (Woman₂)

"The important one is this of delivering at hospital because you get services faster, the baby is given services, if there is blood that has come out you get treated. And if there is more they have a responsibility of referring you to another hospital which is bigger to go and get services." (Woman₃)

"It is a must for that people say people deliver and die, they give birth and bleed. That is when you are told if you deliver at hospital there is some assistance." (Woman₄)

On the other hand several HFWs and CHWs pointed out that women who still deliver at home don't see the need to come to the HF if they feel fine and will actually come to HF for immediate PPC only in case of complications.

"Postpartum, uh-uh! They don't see it as a very big problem unless there is a complication basically. The biggest problem and fear in the community is pregnancy, labour and retained placenta. They really fear it (...) because they know, they tell us that it kills within minutes if it is retained." (HFW₆)

"Those that deliver at home and go through the normal rituals after birth and still feel OK do not see the need to come to the hospital. One instance was when a mother who had delivered at home brought her child to the hospital but did not identify herself as the mother of that particular infant for fear of being offered post delivery services. She said the infant's mother was at home. Later it turned out she was the mother. I asked her what her fear was and she said she was okay after delivery and didn't want any post delivery services since she was okay." (CHW₄)

"I will not come because I am not sick." (Woman₅)

All in all it seems that women's priority in the postpartum period remains focused on the infant's health, as there was little reference in interviews with women about their own health.

"There may be some hidden diseases that may only be detected when the baby is brought and detected if he is getting weaker." (Woman₆)

"To me myself I don't know if I will get any service but for the child I know there is service." (Woman₂)

But it remains unclear what women think of PPC, several women interviewed who delivered at the HF or went to the HF shortly after home delivery were not capable of describing the care they received after delivery. Some explained that they were unconscious most of the time after delivery and do not remember.

Additionally, interviewees mentioned several barriers that women have to face to attend the HF. Long distances to the HF, geography and difficult access are themes that arise from interviews with women but also with CHWs and HFWs.

"It is the geography of the area, most of these mothers come from very far. So if this mother delivered maybe at night and is supposed to go to a facility and the facility is a lot of kilometres away... So you might not see the mother maybe in the first or second day, you might see this mother the other week just because of the distance to the facility. (...) The population is very sparsely populated. Mothers come from very far, yah." (HFW₁)

But the recurrent theme in women's interview that arose was how difficult it is to get to the HF, in particular in terms of transportations. This was also echoed by HFWs and CHWs, with several CHWs reporting that they advise the husbands during home visits to start saving during pregnancy to cover the transportation costs to the HF for the delivery.

"Getting a motorcycle is a problem. My husband is also jobless and is just at home. Getting the money to get a motorcycle to take one to the hospital when the labour pain starts is a problem." (Woman₁)

"Many women see it difficult to give out fare for transport from there to here [the HF] and from here up to home." (Woman₂)

"It's expensive with a motor cycle and the bus is so unreliable." (HFW₂)

"You will sit with them [during home visit] and ask why she does not go, maybe it is because of transport, because at our place transport is the

biggest problem. You will talk with them and show them the importance of reaching here [the HF].” (CHW₈)

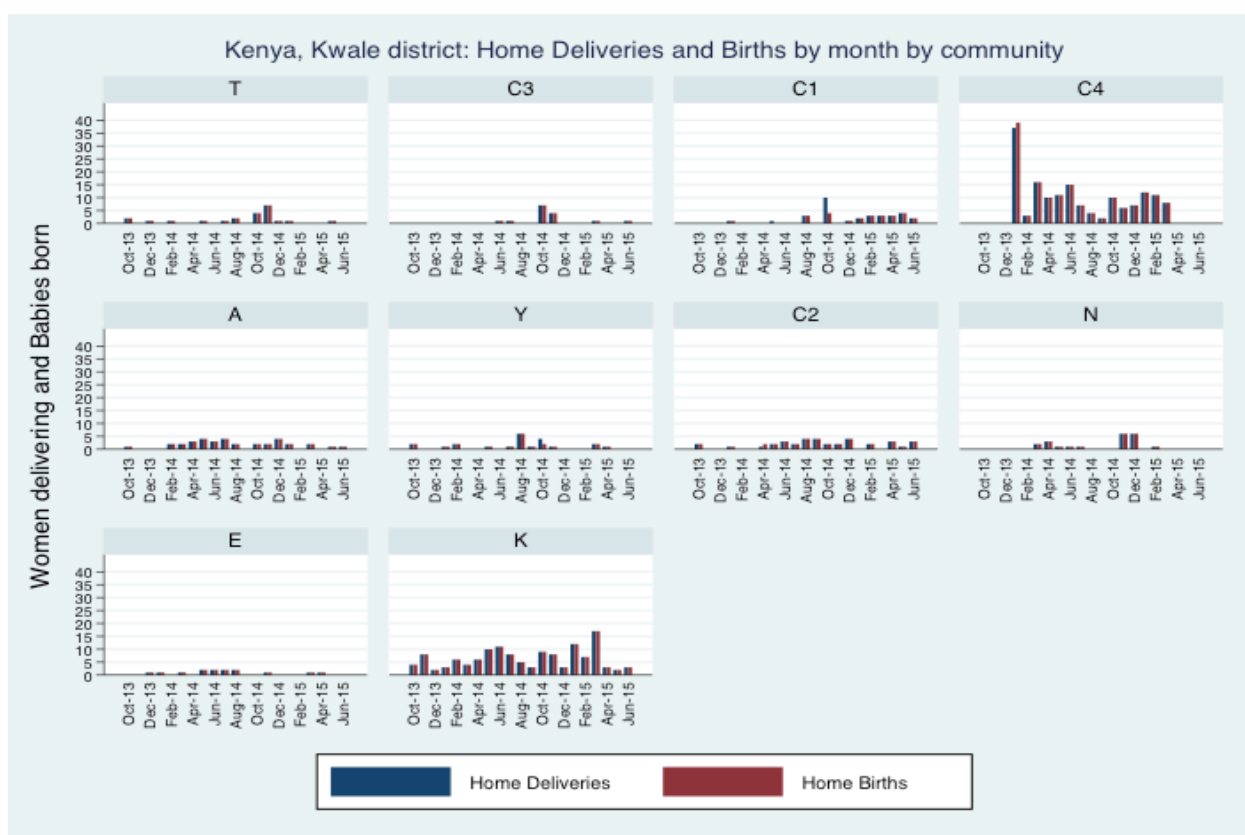
However, in March 2013, the government introduced free MCH services (for antenatal care, delivery, PPC and children under 5) that lighten the financial burden of attending the HF for women and as a result, HFWs and CHWs explained that now more women are attending the HF.

Another element came up in two of the case studies that hindered attendance at the HF for delivering (and hence receiving immediate PPC): the opening hours of the HF. Indeed, in these two cases, the HFs close in the evenings and weekends, therefore women interviewed explained that they would either go to Kwale district hospital (if transportation and distance allow it) or stay at home to deliver.

“[Women in the community] said they are willing to deliver at the facility, but the problem was lack of a health attendant when they get there. The health workers leave on Friday and come back on Monday yet delivery and labour time cannot be scheduled. Women sometimes have to deliver outside the facility or even at times the dispensary lacks water that is what they said. (...) I told them that I will take their grievances to my superiors and I surely did. To tell you the truth, no woman has delivered here at the facility since then. That’s the challenge.” (CHW₉)

This is clearly confirmed in Figure 18 where C2 and C4 have significantly less deliveries than the other two HFs, which are opened at all times and have much more human resources than the dispensaries. Additionally, Figure 26 shows the number of home births per month for each facility over time. There were few home deliveries in most of the communities except for C4 dispensary and K dispensary. In C4 after almost 40 home births being recorded in January 2014, the number decreased. There were very few dialogue sessions recorded in C4 (Figure A7.13 in Appendix), therefore this decline is unlikely to be due to the influence of the MOMI dialogue sessions.

Figure 26 – Home deliveries and births by month, by community, Matuga constituency, Kwale County, Kenya



Furthermore, it was identified in the baseline study that the poor attitude of the HFWs also influenced women's attendance at the HF. From the women's interviews, some brought up this issue but it was related to children's clinic and not delivery and immediate PPC. However, women do not have much interaction with HFWs when they come at the HF and usually receive the service with no or little exchange.

"Just the foul language has changed a little, probably because some of the staff have left. Also, the mothers who come to the clinics are tested for HIV. If they are found to be positive, some of the facility staff used to start going around and gossip about her. But that has since changed." (CHW₄)

"If you see a doctor [healthcare worker] at the clinic you are given a good service but if you don't ask questions they will not give you information in details, but if you ask questions they can give you information." (Woman₂)

"Sometimes the staffs here at the hospital are in bad mood. Out of exhaustion or just by attitude. This determines how fast a referral client [from the community] is attended to." (CHW₅)

Several HFWs interviewed put forward that their attitude has indeed an impact on women's attendance at the HF.

"Some providers may not be friendly to them. The women may not know the importance of the service. Most just come for the immunization and go home, no one may explain to them the importance of follow up visits. (...) We as health care workers need to educate them on the importance of getting appropriate health service and also change our attitude." (HFW₃)

"The people in the community here. It is up to us to sensitize them so that they get to know that they need to know that they should deliver at the hospital. We should do it in a way that makes them want to come to the facility to deliver. If we don't have the time to give them the education because we are overwhelmed or maybe we have an attitude, they may not be willing to come to the facility to deliver. We sometimes are the cause of this." (HFW₄)

"Sometimes back we used to have arrogant health workers who used to keep... (pause) Definitely you are never comfortable if you go to a place where people nag, complain a lot and even shout. Lately things are better. We have health workers who are quite professional. They don't shout to patients. Some would even hit you with the booklet on your face." (HFW₆)

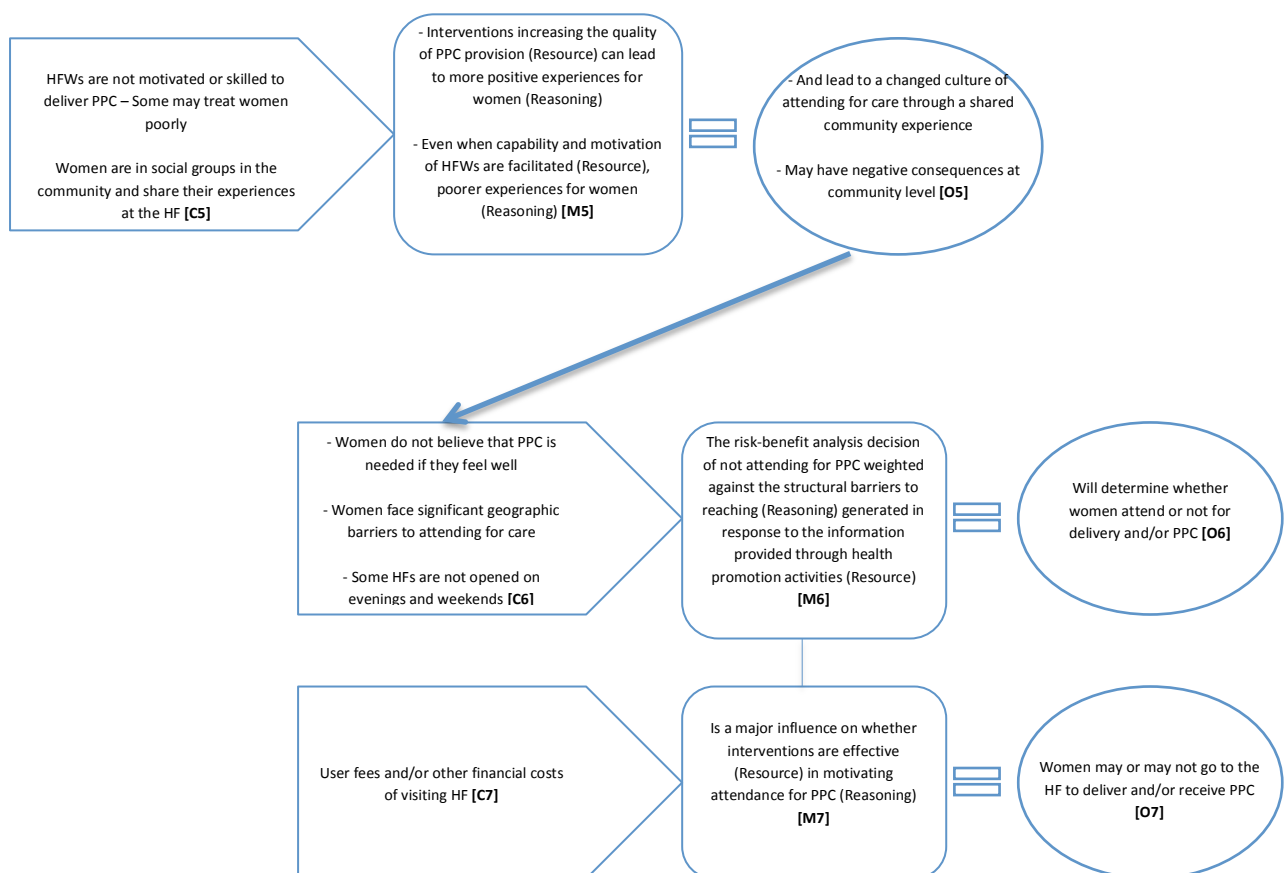
Women's positive and negative experiences at the HF will not only impact their own subsequent visits but will also impact perceptions of the HF in the community. Indeed, several CHWs and women explained that women are in social groups in the community and will therefore spread (negative and positive) information quickly across their social circles.

"In the community like here at home we explain to each other. For example someone like me I can be a teacher to my friend, whatever I get at the hospital I come and tell my colleague and my colleague if she comes from hospital whatever she will have got she comes to tell me that the doctor says this and it is like this... (...) Eee such like things we get them in the community we tell each other." (Woman₃)

"You know if one experiences that, they will in turn go and tell others of what they experienced. They come to the facility and deliver outside: they will tell the others." (CHW₉)

Therefore, because HFWs are not motivated or skilled to deliver PPC and some may treat women poorly – as established in the baseline – and women are in social groups in the community where they share their experiences at the HF (Context 5), interventions increasing the quality of PPC provision (Resource 5) can lead to more positive experiences

for women (Reasoning 5) and lead to a changed culture of attending for care through a shared community experience (Outcome 5). At the same time, even when capability and motivation of HFWs are facilitated (Resource 5) poorer experiences for women (Reasoning 5) may have negative consequences at community level (Outcome 5). Women's experiences have also the potential of motivating them to go to the HF or of becoming another obstacle to healthcare access. As mentioned earlier, women face several difficulties in reaching the HF for delivery and/or immediate PPC such as significant geographic barriers and constraining opening hours in some HFs, but women may also believe that PPC is not needed if they feel well (Context 6). Therefore the risk-benefit analysis decision of not attending for PPC weighted against the structural barriers to reaching (Reasoning 6) generated in response to the information provided through health promotion activities (Resource 6) will determine whether women attend or not for delivery and/or PPC (Outcome 6). Additionally, user fees and/or other financial costs of visiting HF (Context 7) Is a major influence on whether interventions are effective (Resource 7) in motivating attendance for PPC (Reasoning 7), also determining whether women go to the HF to deliver and/or receive PPC (Outcome 7).



4.5 Increase knowledge on and uptake of PPFP

4.5.1 Community and facility-based dialogue sessions

The community dialogue session were already activities meant to be conducted by CHWs once a month during outreach sessions. MOMI ICRH-K trained CHWs to conduct them in a more structured and participatory way with a focus on postpartum family planning. It was later decided by the implementation team to also cover other PPC related issues e.g. hygiene, danger signs, etc. As mentioned earlier several CHWs interviewed admitted that they did not conduct any community dialogues in the last couple of months. During the period of observations, field researchers were only able to observe one dialogue in the community, however the MOMI structure was not followed. Instead, the dialogue was more a community meeting where the group received health education in addition to other civic information. Additionally, no targeted action plans were developed. Some of the CHWs interviewed explained that lack of transport and lack of CHWs are the reasons why the dialogues are not happening monthly.



Community dialogue held by CHW – January 2015

“Transport. The road is not in a good condition. Sometimes you may do mobilisation and on the day it rains making the road impassable. The other challenge is we have few staff. We may plan to go but the staff numbers make it difficult for us at time due to one reason or another. For example if some are on leave or are out attending a seminar then it means

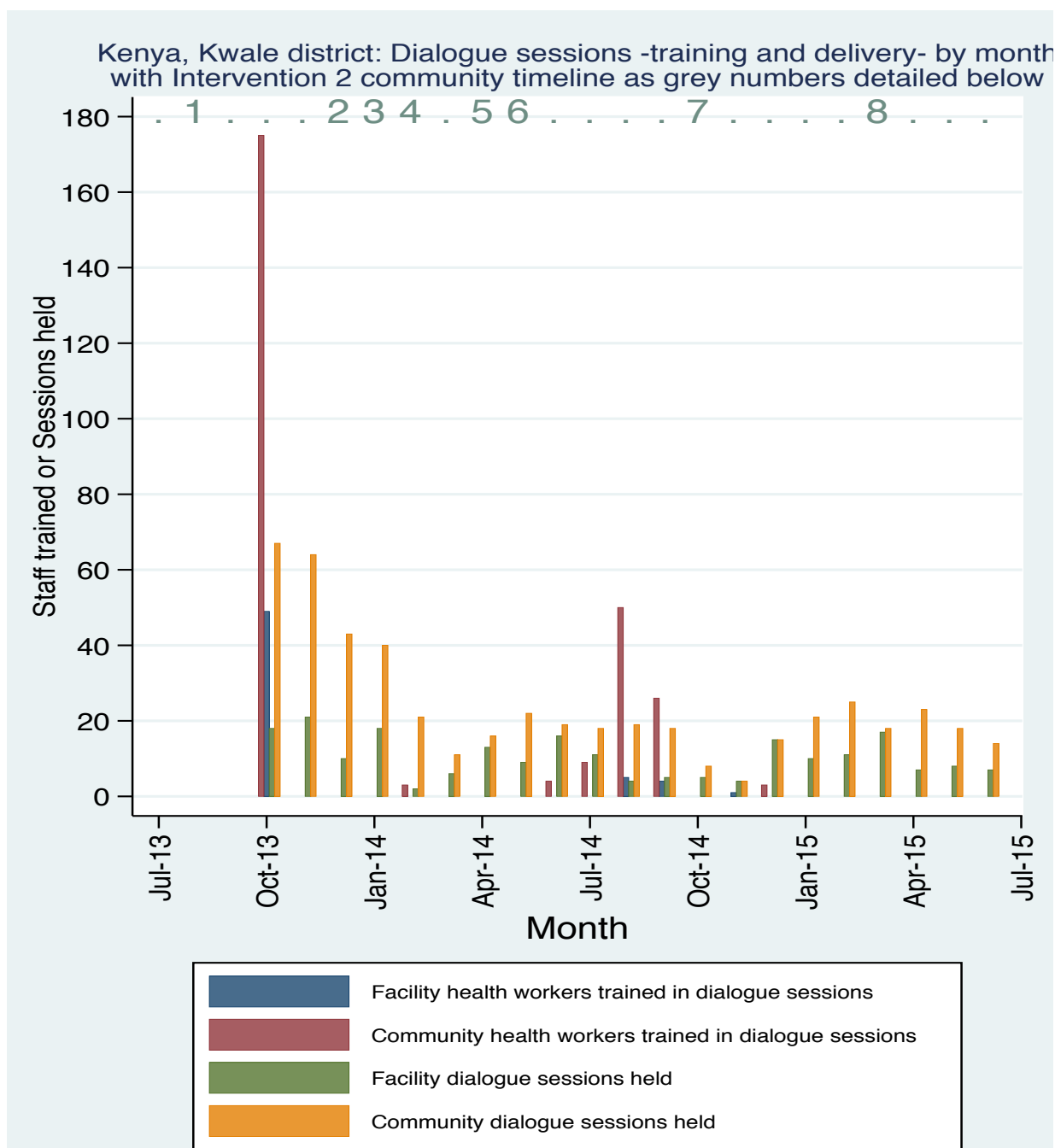
we may not go as planned because we also have other responsibilities at the facility. Another challenge is low turn up after failing to go as planned on previous occasions. The locals may think even on that particular day we’ll not turn up and they fail to come.” (CHW₂)

Data is limited to understand the mechanisms and impacts of the community dialogues as several CHWs interviewed were not conducting many dialogues and about half of the women interviewed never attended a community dialogue. However, from the interviews, it

seems that the message of CHWs on PPFP focuses on the benefits of spacing births rather than the description of the different family planning (FP) methods available.

At the level of the HF, by January 2015, it was decided not to provide MOMI dialogue sessions at health facility level anymore because it was not feasible and practical to arrange these sessions at this level. Furthermore, in January 2014 MOMI ICRH-K chose to only follow-up closely with CHEWs from 3 HFs (and the corresponding 3 community units) regarding the dialogue model sessions in the community, and later added 2 HFs (and corresponding CUs). Figure 27 shows the number of facility and community health workers trained on the dialogue sessions of intervention 2 and the number of dialogue sessions held in facilities and communities per month for the whole of Matuga constituency. After an initial spike of community and facility health workers trained in October 2013, few were trained except for August 2014 when around 50 new community health workers were trained. Dialogue sessions were predominantly held in the community, and after initially around 60 per month in October and November 2013, the number dropped to around 40 in December 2013 and January 2014, and then to around 20 per month or less during the remainder of the time period to June 2015. Figure A7.13 in Appendix 7 shows dialogue sessions per facility.

Figure 27 – Dialogue sessions by month, all facilities combined, Matuga constituency, Kwale county, Kenya



See intervention 2 timeline key at the bottom of Figure 21

4.5.2 Provision and acceptance of PFP

In two cases HFWs were observed providing structured consultations on FP, when mothers come for their infant's vaccination, with an emphasis on long-term methods although women seem to prefer Depo-Provera injections. A couple of HFWs explained that HFWs, although they let women choose their method, prefer when women pick non-

hormonal methods. The rationale behind is that mothers who experience side effects with hormonal methods will tell other women and spread rumours on FP.

“Most mothers do get side effects from the use of the others [hormonal methods] and they get discouraged. The side effects are minor but there are many. Some women get spotting, others don't get their menses while others may experience heavy menses. Others' fertility takes long to resume when they want babies. This leads to misconception because they may in turn go and tell the others of their experiences. Those who use non-hormonal methods are able to get pregnant the moment they stop using them.” (HFW₃)

However, not all women receive counselling on FP, with some women saying they were not offered FP so they just asked the HFW themselves for FP (in general injections) during the infant consultation. Some HFWs also put forward that long queues at the HF meant that women could leave without receiving FP counselling and a method.

“In the facility now we can go back to the staff shortage issue because the commodities are there but now you will have this mother having (pause) likes to have the long term methods the (struggling to think) the IUCD. But because maybe the staff is one or two and it is very busy this mother will have to stay stay, stay and you will end up losing this mother because she will end up going home without getting the method because there is nobody to provide it in the facility.” (HFW₁)

The general perception among CHWs, HFWs, policymakers and MOMI researchers is that there has been a significant and observable increase in FP uptake. HFWs interviewed attributed this increase to the work of the CHWs and, in some cases, the work of Marie Stopes International in the community.

“They are grateful as a community. Many are on family planning now. We were discussing with the facility in-charge the other day about how there has been a decrease in deliveries and increase in family planning uptake. I am yet to look at the actual data to confirm what the in-charge said” (CHW₂)

“In the past, family planning numbers was low and the youth turn up for the same was also low. We used them to talk to the youth about the importance of family planning and explain the methods available. This youth group is composed of youthful CHWs. These are the ones we used to pass the message to the others and it worked well. So they are important.” (HFW₃)

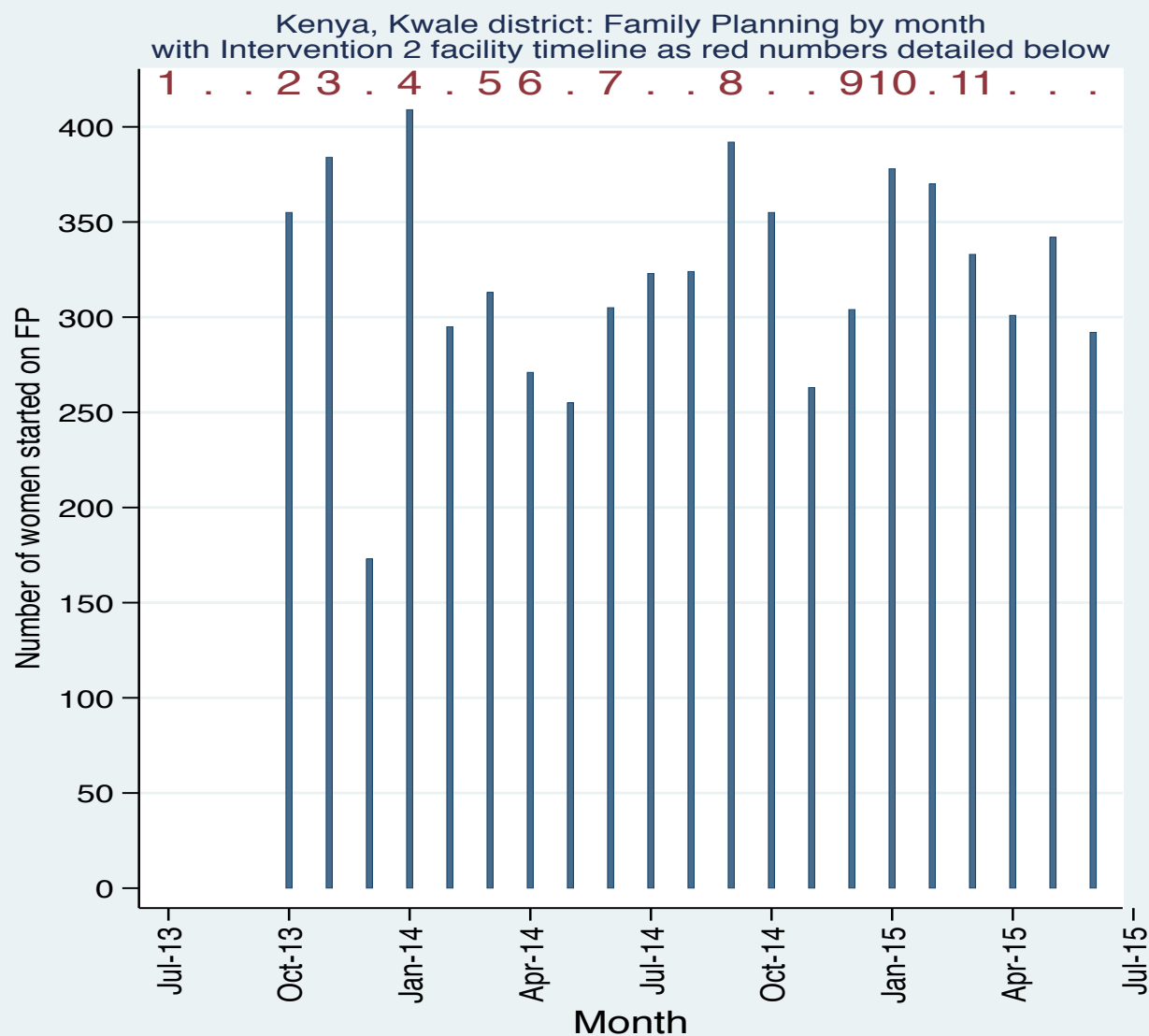
“[Women] are very comfortable with it, most of them have done family planning and of late we have discovered that we started having mothers who are becoming mothers for the first time and they are 22 year and

above. (...) In fact this one we are finding it in 2014 and 2015. 2013 and backwards it was... 16, 17 years.” (HFW₆)

“There are CHWs who has sensitized them. We also talk to them during health educations. Our CHEW has also conducted community dialogues and now even the men are aware of the importance of family planning.” (HFW₇)

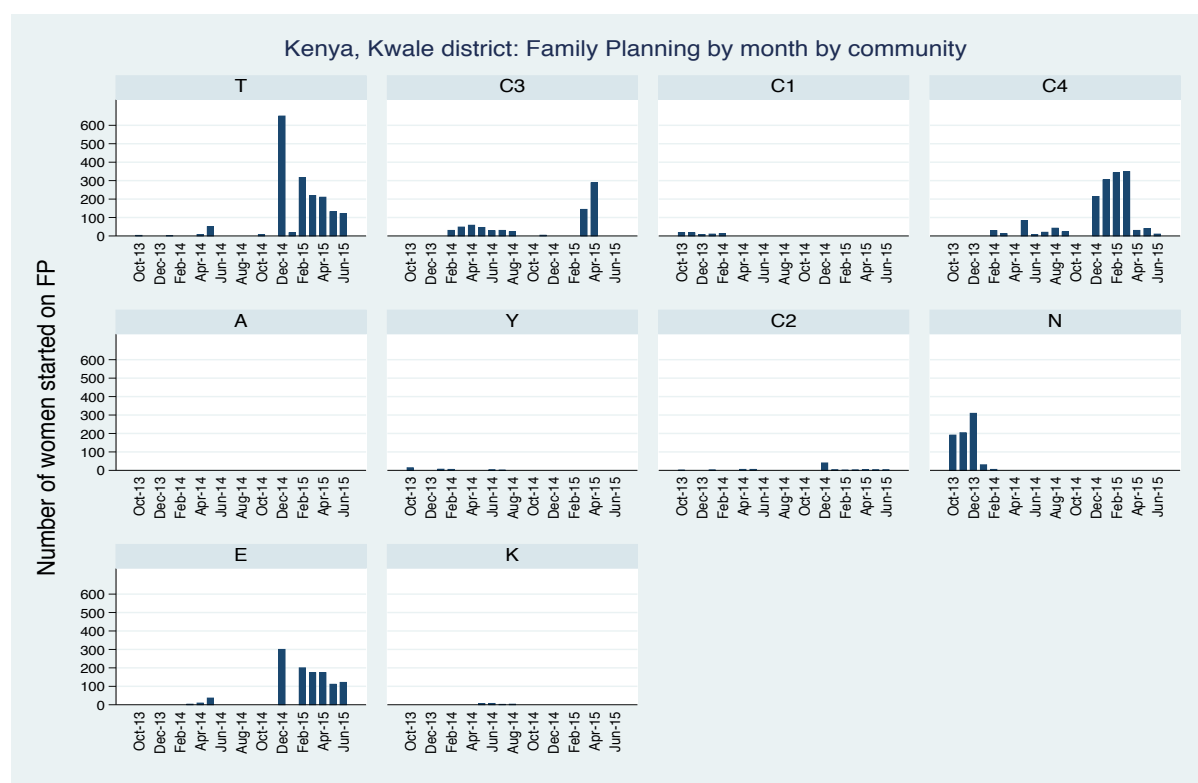
In contrast, three quarters of the postpartum women interviewed were told about family planning (at the HF or in the community) but still do not want to get family planning. Figure 28 shows the number of women started on family planning per month for all facilities combined in Matuga constituency, Kwale County. The numbers fluctuate throughout the period with no clear link to the MOMI intervention 2 timeline of activities indicated as numbers at the top of the graph and detailed below the graph. Figure A7.12 in Appendix 7 shows family planning per facility. Figure 29 shows the number of women started on family planning in each of the 12 communities in Matuga constituency with the four case study areas (C1 C2 C3 C4) indicated. As can be seen from the graph the data is perhaps inconsistently recorded, unless family planning is only sporadically given out at certain times.

Figure 28 – Family planning by month, all facilities combined, Matuga constituency, Kwale county, Kenya



- 1 = 22–26 Jul 2013: 18 facility health workers trained on how to perform dialogue model sessions (same health workers and part of the same training session as mentioned under intervention 1)
- 2 = 16–18 Oct 2013: 1st supportive supervision and mentorship visit. All 10 health facilities visited. Supervision done by Ms Esther Mwachiro (District Reproductive Health Nurse), Dr Vernon Mochache and Eunice Irungu
- 3 = 18 Oct 2013: Training organised at Tiwi health centre of 3 facility health workers from 3 health facilities: Magodzoni, Mazumalume and Ng'ombeni dispensary, on provision of long term family planning methods
- 4 = 24 Oct 2013: Training organised at Tiwi health centre of 3 facility health workers from 3 health facilities, Kizibe dispensary, Mwaluphamba dispensary and Mkongani health centre, on provision of long term family planning methods
- 5 = 1 Nov 2013: Training organised at Tiwi health centre of 2 facility health workers from 2 health facilities: Matuga and Vyogwani dispensary, on provision of long term family planning methods
- 6 = 27–28 Nov 2013: 2nd supportive supervision and mentorship visit. All 10 facilities visited by Dr Vernon Mochache and Eunice Irungu. Wall charts for neonatal resuscitation distributed to the facilities
- 7 = 4 Jan 2014: Structured dialogue model sessions were introduced in the health facilities after finalizing of standardized procedures. It was agreed that focus will be on 3 health facilities: Vyongwani, Magodzoni and Mwaluphamba
- 8 = 11–13 Mar 2014: 3rd supportive supervision and mentorship visit in all 10 health facilities by Dr H. Elb-Saidy (Director of Health, Kwale County), Dr Kevin Kinyua (DMOH), Mr Galole Dima (District public health Nurse), Juma Ahmad (Community liaison officer, Matuga sub-county), Dr Vernon Mochache and Ms Eunice Irungu
- 9 = 9–11 Apr 2014: 4th supportive supervision and mentorship visit. All 10 health facilities supervised by Mr Galole Dima (District public health Nurse), Vernon Mochache and Eunice Irungu
- 10 = 24–25 Apr 2014: Distribute pictures for dialogue model sessions on PPC and FP to Magodzoni dispensary and Sunkumbe CU, Mazumalume dispensary and Mazumalume CU and Vyogwani dispensary and the Vyokuta CU
- 11 = 10–13 Jun 2014: 5th mentorship, supportive supervision and M&E visit by MOMI staff (Vernon Mochache). All 10 health facilities visited
- 12 = 2–3 Sep 2014: 9 newly posted facility health workers trained on how to perform dialogue model sessions (same health workers and part of the same training session as mentioned under the intervention above)
- 13 = 10–12 Sep 2014: 6th supervision of intervention implementation (all health facilities visited) conducted by Eunice and Mochache
- 14 = 17–18 Sep 2014: Distribution of dialogue model presentation booklets to all health facilities (each facility received two booklets). In Simkumbe, Mzumalume & Vyokuta CU the five most active CHWs also received a booklet
- 15 = 15–18 Dec 2014: Supportive supervision and M&E visit by MOMI staff. 4 facilities visited
- 16 = 21–22 Jan 2015: Field visit by Eunice to collect health facility and event diaries (only visit those health facilities who received a diary). Attend a community activity at Matuga to supervise and support dialogue session during an out-reach activity at Nganze village
- 17 = 27 Mar 2015: Distribution of A3 size picture booklets for uptake of PPC services to all CHEWs and health facilities by Eunice

Figure 29 – Family planning by month, by community, Matuga constituency, Kwale county, Kenya



The main barrier to FP uptake described by women, CHWs and HFWs is the husbands. Participants explained that women need permission from their husband to get family planning. Some interviewees explained though that men generally are against family planning, as they believe their wife will be more attractive to other men if she is not pregnant or breastfeeding. In women's interviews, they referred to their husbands as 'the owner' and would need their permission to receive PPFP unless they can find a way to hide it – hence why a lot of women prefer the injectable method.

"If [women] want to do family planning? They will be forced – if you have gone to take family planning like me I want to take the injection – the book you will be forced to go and keep it at your mother in-law's place. Don't keep it in the house because if you keep it in the house and your husband sees it can be war or chaos." (Woman₂)

"So if it is free there is no problem but if it is money where will I get it from? So I must tell him [the husband]. But if it is free you can use [FP] secretly." (Woman₄)

“Women take up family planning for their own individual benefit and want a method that offers privacy and is not conspicuous. Injectable methods are good for this.” (HFW₃)

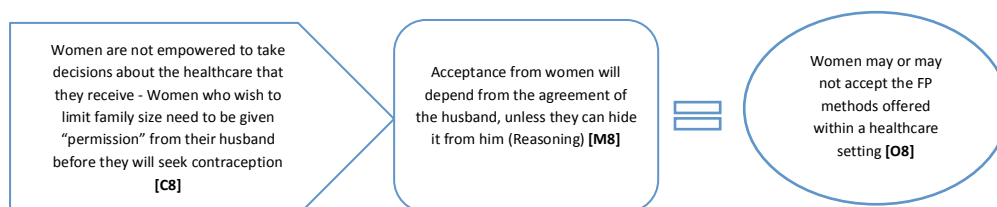
“We observed that all mothers came for specific FP methods already in their minds. They told us that they learnt of these methods from friends or relatives who use them; they were told they are safe and easy to use in secrecy for those whose husbands were against their use.” (Field observations)

Women shared their motivations to receive FP, which revolve around the need to space their children in order to give them a better chance to be looked after properly rather than having several children around the same age.

“For me it was just a decision that I took myself. My child is still young and now if I start to get another pregnancy, my child will grow weak and will not have peace because I will have robbed her of her health, she will no longer be breastfeeding. That is why I decided to take family planning so that I continue until that stage when she will have grown up then I will stop to get another baby.” (Woman₇)

“I wanted to do family planning so that I don’t give birth closely. I didn’t want to give birth closely (laughs) you know life these days is bad (laughs). (...) You men are bad if you deliver so frequently you get married to another woman (laughs) and he leaves you there with your children, they are still young they need food, who is going to give them food?” (Woman₈)

Women are not empowered to take decisions about the healthcare that they receive and therefore those who wish to limit family size need to be given “permission” from their husband before they will seek contraception (Context 8). Acceptance from women will depend from the agreement of the husband, unless they can hide it from him (Reasoning 8), thus women may or may not accept the family planning methods offered within a healthcare setting (Outcome 8).



4.6 Conclusions on implementation of MOMI in Kenya

Below, we summarise the findings of the MOMI implementation in Kenya and the factors that have an impact on MOMI's objectives: increasing the demand for and improving the provision of PPC.

Overall, the interventions in Kenya underwent considerable changes to programme implementation and were limited to improving the provision and uptake of immediate postpartum care (within 72 hours of delivery). In particular the evaluation demonstrated the following: see box. The only notable change in this setting is the increase in women delivering at the health facility and in women coming to the health facility for immediate postpartum care within a couple of days of home delivery. This change was related to the MOMI interventions but also to concurrent facilitatory mechanisms such as the introduction of free maternal and child services and P4P for institutional delivery.

Degree of MOMI implementation in Kenya:

- Focus of MOMI interventions in Kenya limited to immediate PPC rather than the different elements planned.
- Considerable changes to programme implementation throughout the length of the project.
- All CHWs received the initial training from MOMI ICRH-K but refreshers were sporadic and targeted at HFWs. Despite this, some HFWs interviewed had still not received training at the time of evaluation.
- Training on VSLA for the CHWs took place late in the project – only 4 community units were trained by the time of the end-evaluation.
- Supervision of CHWs was the responsibility of CHEWs and was not regular.
- The planned dialogue model intervention in the health facilities was discontinued in January 2015 for lack of feasibility and death reviews were never conducted.
- HFWs highlighted that there has been a change in the last couple of years with now more mothers delivering at the HF or coming for immediate PPC when they deliver at home.

Factors influencing demand from women for PPC:

- Low retention rate of CHWs, out of 547 trained CHWs only about half remained active throughout the project, creating gaps in the implementation of intervention 1 in the community.
- Community activities were well received by the communities where they were implemented.
- Women who deliver at the HF believe that TBAs attending home deliveries are not capable of handling complications unlike HFWs. However, women who deliver at home will not come to the HF for immediate PPC if they feel fine because they do not perceive the need.
- Women's priority in the postpartum period remains focused on the infant's health and not their own health.
- Long distances to the HF, geography, difficult access, lack of transportation, limited opening hours of some HFs and long queues are hindrances to women attending the HF.
- Women's positive and negative experiences at the HF will not only impact their own subsequent visits but will also impact perceptions of the HF in the community.
- Husbands constitute the main barrier to uptake of postpartum family planning.

Factors influencing provision of PPC by HFWs:

- Trainings and supervisions were well received by HFWs, although not all HFWs interviewed received them.
- The responsibility for delivering PPC falls mainly on those who received the initial training, as the trainees did not relay what they learnt to their colleagues.
- Provision of immediate PPC within 48 hours of delivery (72 hours for women who delivered at home) has become part of the HFWs routine. However, women are only kept for a few hours (between 2 and 12 hours) at the HF after delivery, raising questions on the quality and comprehensiveness of the immediate PPC provided.
- HFs receive financial incentives for each HF-based delivery, through a government P4P system, meaning that more women attending the HFs through the community component of intervention 1 is beneficial for HFWs

Chapter 5 – Ntchisi district, Malawi

5.1 Interventions Implemented in Ntchisi District

In Ntchisi District, three interventions were chosen and implemented across 12 health facilities (HFs) and in 1 community (called Traditional Authority) although it was planned to implement MOMI in two additional Traditional Authorities:

- Intervention 1: Strengthening clinical management of postpartum care (using clinical mentorship and quality care reviews)
- Intervention 2: Increase utilisation of postpartum family planning
- Intervention 3: Strengthening community postpartum care management.

Intervention 1 aimed to strengthen clinical management of PPC with a particular focus on immediate PPC, secondary PPH, sepsis, anaemia, HIV screening and management, and FP for mothers; and a focus on growth monitoring, nutrition counselling, sepsis and pneumonia diagnosis and management for infants. Additionally, MOMI PACHI added to the Malawian PPC schedule (2 hours after delivery, 1-2 weeks after delivery and at 6 weeks), additional visits at months 3, 6 and 9.

Intervention 2 focused on increasing uptake of postpartum family planning by improving provision through training and supervision for HFWs. In the community, demand for PPFP was to be increased through sensitisation meetings, dialogue sessions and through the recruitment of community based drug administers for door-to-door distribution of FP commodities in partnership with the Clinton Health Access Initiative.

Intervention 3 had two components to strengthen community PPC management and mobilise communities to adopt positive behaviours related to MCH care. The first one involved training community volunteers to conduct community action cycle meetings, where men and women in the community come together to form groups and discuss maternal and infant health problems that affect them most, prioritize them, identify solutions to the problems, implement the strategies and evaluate the outcome/impact using a five phase action plan to guide them in their discussion. It was also intended that men's groups and adolescent groups would be formed to work on the same principles as the women's groups. The second component entailed training MOMI volunteers to conduct home visits. MOMI volunteers and their activities were coordinated by existing Health Surveillance Assistants (HSA) who are paid by the government.

5.2 General Context of Implementation

Baseline studies conducted by the MOMI consortium shed light on the implementation context in Ntchisi and Malawi that has been described in detail in previous work packages (WP 2, WP 3 and WP 4). The table below summarises the main findings.

Table 8 - Contextual factors identified in baseline studies in Malawi

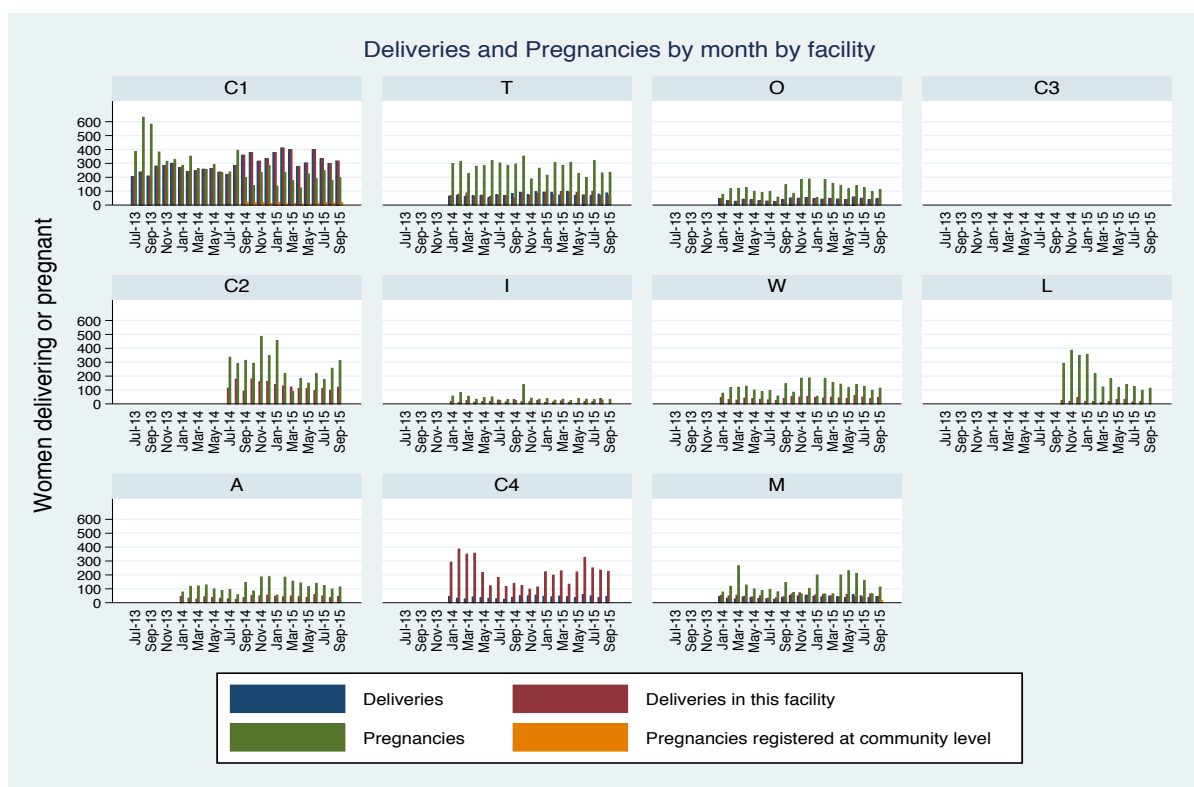
Contextual Factors National/District level	<ul style="list-style-type: none"> - Inadequate funding for capacity building - Comprehensive MCH and PPC policies based on international guidelines - Postpartum period defined as the first six weeks after childbirth (PPC visits within 2 hours of childbirth, 1-2 weeks after childbirth and at 6 weeks) - Implementation of MCH and PPC policy is challenging and problematic because implementation is dependent on donor funding - Whole health sector heavily dependent on donor funding - Poorly performed district supervisions
Contextual Factors Health facility level	<ul style="list-style-type: none"> - Poor attitude of service providers - Inadequate knowledge on importance of PPC among health providers - Lack of skilled HFWs - Lack of motivation from HFWs - Lack of human and material resources - Actual delivery of PPC services at district hospitals and health centres is very poor - No integration of PPC in other health services
Contextual Factors Community level	<ul style="list-style-type: none"> - Hard to reach areas and geographic inaccessibility of facilities - Preference for traditional births attendants - Inadequate knowledge on importance of PPC in the community - Fear of unknown among the general population - Traditional structure where men dominate in health decision-making - Traditional remedies used to treat infants - Preference for traditional family planning - Community members feel they do not receive adequate healthcare at the HF - Poverty and low education levels - MNH services free of charge

The four HFs evaluated vary in size, resources and organisation. In all the HFs, the outpatient department, providing among other things services for infants (immunisation, growth monitoring) is separated from the maternity where maternal services are provided. Two of the HFs have only two nurses and are organised in a similar way where specific activities are provided on specific days except for maternity and PPC services (postpartum discharge and one week postnatal check-up) that are provided every day. One of those HFs

is a paying HF owned by the Christian Health Association of Malawi but through a service level agreement with the government, postpartum services are subsidised up to 6 weeks after childbirth. The other two HFs are providing all services on a daily basis as one of the HF is slightly bigger with 4 nurses and the other HF is a district hospital.

Figure 30 shows the number of deliveries per month in each of the facilities in Ntchisi district, Malawi with the names of the facilities anonymised. C1 (case study 1) has by far the largest number of deliveries per month, averaging around 300, with an increase noted from mid-2014 onwards. Facility C2 only has data recorded from July 2014 and has around 100-150 deliveries recorded per month, but has around 2-3 times as many pregnancies recorded per month, suggesting that many of the women going for antenatal care (when the pregnancy is recorded) may deliver elsewhere, perhaps in facility C1. There were two different indicators for deliveries recorded in the routine data collection “Deliveries” (blue bars on Figure 30) and “Deliveries in this facility” (red bars); these are usually consistent with each other but in the case of facility C4 are very divergent. Case study 3 (C3) has no data on deliveries or pregnancies, and C4 has data only from July 2014 and shows a decline in deliveries from around 180 in August and October 2014 to just over 100 in September 2015.

Figure 30 – Deliveries and Pregnancies by month by facility in Ntchisi district, Malawi



Please note that for Malawi all graphs will be by facility and not aggregated into overall timeline graphs because many of the facilities are missing data for many of the indicators and there are also large differences from month to month for some indicators in some facilities suggesting the data is of poor quality. Both of these factors would make combined 'all facility' graphs misleading and difficult to interpret.

5.3 Implementation Strength of interventions

The implementation strength in Malawi (Figure 31) was weak and challenged by an over ambitious intervention plan especially at the community level (MOMI Consortium, 2012). There was delay in the implementation of activities and some of this was related to changes in management structures within the implementation team towards the end of 2014. At the same time, there was also a complete turnover in district implementation team supporting MOMI. Guidelines for PPC were finalised in September 2013, three months later than the planned completed date of June 2013. Facility Maternal and Neonatal Death Surveillance and Response (MNDSR) was not conducted (although a MNDSR committee had been formulated). Community sensitization meetings on PPFP were conducted in February 2014 while the activity was scheduled to be completed in September 2013. Community intervention manuals and tools scheduled for July 2013 were completed in August 2014. Training of community health facilitators was delayed by a year (August 2013 vs. August 2014). Even so, training was incomplete for the community interventions. The facility interventions were implemented for a very short period of time, with most implementation activities being less than 18 months. Most of the community intervention projects were still in the very early stages of implementation even as the project was coming to a close in 2015. Field visit reports from 2013 observed very little progress and slow process of implementation of activities. Supervision and mentorship for the community teams was not provided. Limited (n=3) supervision visits by the Ntchisi district implementation team were conducted in the health centres. Feedback mechanisms were not established. There was a range of activities that were planned without giving much thought into the execution of those plans. The community intervention plans were overwhelming with community group meetings to be held with women's groups, men's groups and adolescent groups, but few of these took place (Appendix 2: Intervention timelines).

In addition there were also dialogue sessions planned in the community. The capacity to deliver such an intense community intervention does not seem to have been thought

through. Moreover, the strategy was to implement through existing health systems structures, which proved to be a challenge, given the competing priorities that exist in the Malawian health system. Community intervention using male PPFP motivators was never rolled out in the project nor did the community health dialogue sessions take place.

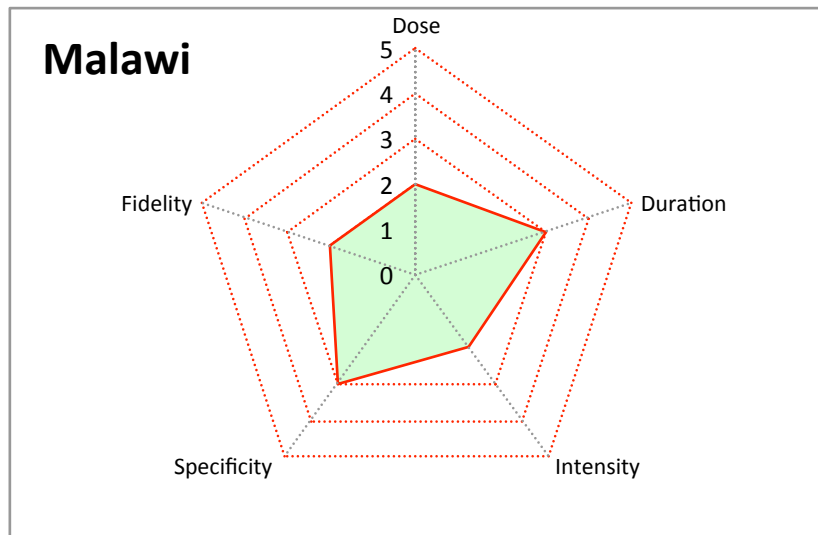


Figure 31 - Implementation strength in Ntchisi, Malawi

5.4 Strengthening clinical management of PPC

5.4.1 Resources provided to HFWs

HFWs were provided with standard operating procedures in the form of wall charts and with PPC guidelines. According to the implementation timeline (see Appendix 2), some HFs received the wall charts and guidelines in November 2013 with no instructions or trainings on how to use them until May 2015. An additional 3 HFs received the PPC guidelines in September 2014 (without training) and it is unclear whether or not all MOMI HFs eventually received the guidelines. Most HFWs interviewed said they use the PPC wall charts and guidelines in case they are unsure about a procedure or in case of complications.

“Sometimes maybe when you are not sure of what to do at a particular time you just crosscheck, or maybe you have forgotten something, you just check the manuals and the guidelines; yah.” (HFW₁)

“And, when there is something that you don’t understand, you quickly go in.” (HFW₂)

"In fact in issues like complications, we are supposed to check the guidelines, what are the guidelines saying about that issue. But maybe other routine things because we do them on daily basis, it's simple, we just do it." (HFW₃)

However, field researchers only observed the use of the wall charts and guidelines in one of the HFWs evaluated. One of HFWs interviewed did acknowledge that the guidelines are not being used.

"Yeah, the only thing that happens is there are always shortcuts out of those protocols... because if we were to say you follow the proper channels, then I will be lying to you because that's not what is happening on the ground... it's far from it, very far from it" (HFW₄)

Seven of the HFWs interviewed did not receive the MOMI training. Actually some of those interviewees thought that the project had already phased out.

"I don't think there is deliberate effort to orient these people [new HFWs] using members of staff specifically into issues having to do with MOMI." (Policymaker₃)

"Since I have not worked for long with MOMI, I would not say there is change because by the time I arrived at this department, rumours were that the MOMI project phased out." (HFW₅)

HFWs interviewed who received the training found it beneficial as a way to remember the PPC guidelines. Regrettably, the knowledge gained during the training was not shared with colleagues who did not take part in the training.

"It was a good experience because at times you to are reminded on the management because most times at a facility like this one, at times these cases are rarely found. So you also feel like because these are rarely found I will not have time to read the manuals. But when you are updated on how you should manage those patients, you are reminded and you are ready when you meet with such conditions." (HFW₄)

From the interviews and observations, it is clear that HFWs receive a lot of capacity building activities from various stakeholders and NGOs. HFWs receive financial incentives for attending the activities, which motivate them. But this also creates gaps in implementation and service delivery as HFWs would leave their clinical duties in order to attend paid trainings.

“Maybe if I am trained I will be motivated to provide those services. (...) Because I will get some money there at the training, so when doing it I will know that oh, I got some money from MOMI one day, so I have to do this.”
(HFW₆)

“We observed that sometimes the number of staff on a shift is well planned but there is lack of proper management and monitoring of human resources as it was noted on several days that staff shortages were created within a ward due to HCW leaving their clinical duties to accompany NGOs to the field or attend trainings which were not in their plan because NGOs were offering allowances for these activities.” (Field observations)

One of the HFWs interviewed even explained that during a MOMI supervision visit he pretended not to know how to insert an implant to insure he will be able to attend a training.

“So they supervised me, and then they called one who came for a visit. How do I do? Then because I was unable. No not unable but I was not willing to insert implants. Because I knew that some were trained somewhere else within Ntchisi. So if I will be inserting them I won’t go for training (laughs). So I thought I shouldn’t be inserting these but that day motivated me to start inserting. So I pretended to be somebody who doesn’t have knowledge of implant insertion.”
(HFW₇)

In addition to gaps in trainings on PPC guidelines, there have been gaps in monitoring, mentoring and supervising HFWs. The implementation timeline (Appendix 2) indicates that only one mentorship visit and one supervision visit took place up to July 2015. As a result, only a couple of HFWs interviewed were present during a MOMI supervision.

“[MOMI supervisions] do strengthen, if somewhere you were weak, or you forgot, you are able to ask” (HFW₂)

*“- MOMI. This year aah yes they have been coming.(...) Just for reports.
- Not supervision?
- Not supervision as such. Just reports.”* (HFW₇)

Moreover, the district visits, according to the HFWs and observations, are scarce and do not include a component on PPC, which means that HFWs have little opportunity to be monitored or supported in the implementation of PPC guidelines.

“[Supervisions] help when things are not going on properly, you realise your problems and they may come in to assist. Also they may understand why things are not going properly, because there may be reasons that make things not to go on properly. So, if they are not visiting us, they cannot know our problems, and they cannot also know the reason we are failing to perform as necessary.” (HFW₃)

"[Supervisions] motivate us. It shows your seriousness and the seriousness can only be measured if, because you can be coming for supervision but if there are issues to be addressed and they are not addressed you can still feel that nothing is being done. But if you come for supervision, you can identify some problems and you address them you feel okay." (HFW₄)

"Every change comes with resistance and it's not easy to implement change it relies on continuous supervision, and continuous encouragement. A problem that may affect the delivery of change is that if there is no good supervision this can affect change. So if you are in the ward and you are not implementing change can be affected. If you are just telling people do this and not doing, change cannot happen. Close supervision is supposed to be done for change to be made easier, follow up and someone as a focal person is supposed to be a leader in that ward." (HFW₈)

5.4.2 Delivery of PPC

Barriers to the delivery of PPC

HFWs put forward several elements that are barriers according to them to the delivery of PPC. Barriers mentioned include the, lack of material resources, lack of dedicated physical space to conduct PPC consults, lack of service integration, lack of staff and high workload. The lack of material resources was mentioned in all cases, including the district hospital, where HFWs interviewed complained of the lack of basic equipment such as blood pressure machines, scales, sterilising material, forceps, reagents for urine tests and vacuum extractors. Lack of material resources is a barrier also acknowledged by the policymakers interviewed

"Routinely, I am sure that postpartum care starts after third stage of labour when starting fourth stage of labour; and sometimes, midwives are willing to do what they are supposed to do on that one. But sometimes maybe it happens that there is not enough staff, you can't monitor the patient every 15 minutes for two hours. That's why sometimes maybe we send these women to postnatal ward soon after delivery; but they are supposed to be kept in the labour ward for two hours while observing them, checking their vital signs. Sometimes we may have problems like no stock for batteries for the BP machine, so in that case we do not check for vital signs." (HFW₉)

"Like the equipment is a challenge. Here at [C2], at present, we have only three delivery tweezers. Now if you look at the number of people, who come to deliver here it's a challenge. And also, the people who work are very few. Mmm... Instead of giving adequate care, it is not possible, because a woman in labour needs someone to be close to her, but it is not always possible. As a result, they are maybe left with a guardian [family member that came with

the mother]. You go and do the other thing, because if you wait here, then other things have stopped. Then, it's a challenge." (HFW₂)

"If you don't have equipment, even if you have knowledge, the job is not done. So equipment is very important." (HFW₂)

Additionally, some HFWs explained that there is no dedicated space for conducting postpartum check-ups unlike the other services provided for women and infants, fact that was verified by the field observations.

"In fact there is no designated place [for PPC]; unless [women] come for six week postnatal check-up, usually they find us there, where we conduct family planning. (...) But for one week postnatal check-up, it's not specific." (HFW₃)

"We saw that it was not conducive that the [MOMI] programme could work properly. (...) There was no space for us to conduct the postpartum care, of course others suggested we use the family planning room for this programme but we saw that it was not going to work." (HFW₅)

Moreover, services for mothers and infants are hardly integrated except for Case 4 where family planning is integrated with postnatal check-ups and under 5 clinics.

"The mother has come for under-five clinic; instead of coming on the other day for family planning; she receives family planning methods on the same day. So you can see there is postpartum care, under-five clinic, and family planning on the same day. So it has positive impact on the health worker as well as the mother." (HFW₇)

On the other hand, in Case 3, services are not integrated. In Case 1, only the first infant vaccination is integrated with PPC whereby the HFWs from the outpatient department come to the postnatal ward to provide the vaccination. In Case 2, all MCH services are offered daily to accommodate MOMI interventions but according to observations, HFWs do not refer women to the appropriate services even when the services are offered next door.

"Most postpartum women who reported at 6 weeks were coming for immunisation and family planning clinic for contraceptives by themselves and were not being referred by healthcare workers. For instance, in the immunisation room the women who were coming for vaccinations of babies were given immunisation as routine and were being asked about their family size intentions and plan for contraception and they were encouraged to practice family planning methods without being actually referred for the services though they were being offered in the next door." (Field observations)

Many postpartum women are then ‘missed’ as they are not referred to other services after they receive the vaccination for their infant.

“I think based on the numbers it’s positive; because if they are coming here they trust us. Aaah, maybe the only downside is that they have to move here and there. But maybe if all these services were provided once. Like the woman comes for immunisation of her baby and at the same time postnatal check is also conducted on her, things could have been better. But when a woman stand on queue for immunization of her baby, and after that she also goes to the ward for postnatal check-up...maybe it’s tiresome to some of these women and it may also contribute to some of these women not attending the postnatal check-ups. These women maybe can just prioritize the immunisation of the baby and lose some services on the way, yah it’s possible.” (HFW₁)

“Things could have been made easier [with integration], because we will be able to catch the women when they come for the check-ups. But then, because services are not integrated that is why we miss most of them” (HFW₄)

These barriers are exacerbated by the lack of staff. Lack of staff as a barrier was mentioned in all cases, even in the bigger HF and in the district hospital. In those HFs, although the number of HFWs planned to be on shift is relatively high, it was observed that the number of staff actually working the shift is low and does not match the workload. This difference is the result as we mentioned before of HFWs leaving their clinical duties to attend paid trainings and activities organised by other stakeholders and NGOs. It was also observed that some HFWs leave their shift to attend personal business and that there are no monitoring or accountability mechanisms in place to avoid staff shortages.

“For things to move well, there is the need to have enough staff. Sometimes a job cannot be done because maybe the one who is supposed to work is absent, or is sick. So, things fail to happen.” (HFW₂)

“There seem to be so many freedoms around, because of lack of supervision of health workers.” (Participatory Evaluation Workshop participant)

“Of course at one time we were many; there were five or seven of us. Sometimes it could happen that on duty roster you appear many but in reality we were just maybe two, and out of those two one has to go and attend the outreach clinic. (...) The one who remains at the station will be seeing the family planning, pregnant women, and you are also needed to see the postnatal care, in that way the workload is huge.” (HFW₅)

“There are no consequences to whatever we [HFWs] do. You can neglect a patient, you can do whatever, but there are no consequences.” (Participatory Evaluation Workshop participant)

“Healthcare provider attitude; sometimes it’s not an issue of shortage or whatever, but it’s just individual attitude, people will just choose maybe not to give out some services.” (Participatory Evaluation Workshop participant)

In the small HFs, the limited number of healthcare workers in addition to an important workload means that they cannot provide services to all women as they prioritise women in labour, then pregnant women coming for antenatal care, then women coming for family planning and eventually PPC check-ups. As a consequence postpartum women have to face long waits if they do stay to receive PPC.

“One day there was no midwife to provide MNH services from morning up to noon when the nurse who was working the night shift and was supposed to be resting to prepare for another night shift had to come to provide services.” (Field observations)

“Imagine the nurse is alone, she has to manage the labour ward, the postnatal, so, this is one contributing factor that is hindering provision of such services.” (Participatory Evaluation Workshop participant)

“On a certain day the researchers observed a typical scenario of a situation whereby the midwife was overwhelmed with work. On this day we arrived at the facility around 8am and we found one midwife who was alone on a day shift conducting the antenatal clinic. There were over a 100 women in the waiting area queuing for family planning, PPC check-ups, immunisation and antenatal services. On top of that there were 12 postpartum women who had delivered over the weekend pending discharge. The midwife conducted a family planning clinic after seeing the antenatal mothers. Around 11.30am the midwife started reviewing the in-patient postpartum women as part of the discharge protocol. (...) As the midwife was reviewing the last two clients, a woman reported in the labour ward in second stage of labour. The midwife stopped the postnatal discharges, advised the remaining women to go back to their beds so that she can attend to the woman in labour.” (Field observations)

“Like I said, you may be busy doing something else, the women will just leave because there will be no one to attend to them. So usually for them, when they see they are okay, they will just go home. As long as my baby has been vaccinated, as long as I have received what I wanted.” (HFW₄)

“A big challenge is congestion or increased workload. For you to help a mother who has come for postnatal care; maybe it is found that we serve her very late. Because priority is given to those who are in labour or those who have come with a certain problem; that’s an emergency problem. You attend to those ones and [postpartum women] are taken care of very late. So priority is like given to those who are in labour on that particular time. And for those who have come for postnatal check-up, they are being attended to very late.” (HFW₇)

Therefore the HFWs interviewed complained of the high workload and being overwhelmed, which demotivates them to implement and deliver the MOMI interventions.

“For instance MOMI, the way I heard about it that the idea of giving postpartum care to a one week postnatal check up woman then, six weeks then three months was good. However, I feel if there was a special room for that, or integration because of the six-week check-up with the baby maybe if it was continued. But now it stopped due to lack of staff and everything ended there and then.” (HFW₅)

“At times we may wish to [implement PPC changes] but then, ...what, ...to be honest with you, what happens here is like you have had a busy day and after that busy day what you think is that I should just go home and rest. Meaning, all those things, you forget them. You will not put them in place. For you ...you think that woman had delivered I have sent her to post natal ward, that’s okay. And it’s so calming because you feel, I have had a long day. Even the documentation at times it’s not properly done because you feel now I am tired. The woman can deliver and you will not even document here, maybe you will document tomorrow in the maternity register or when discharging the woman, because that time you were tired and you felt ...aaa, I will do this later because you were tired. So I think because of that, that’s the reason why most things have not been put in place.” (HFW₄)

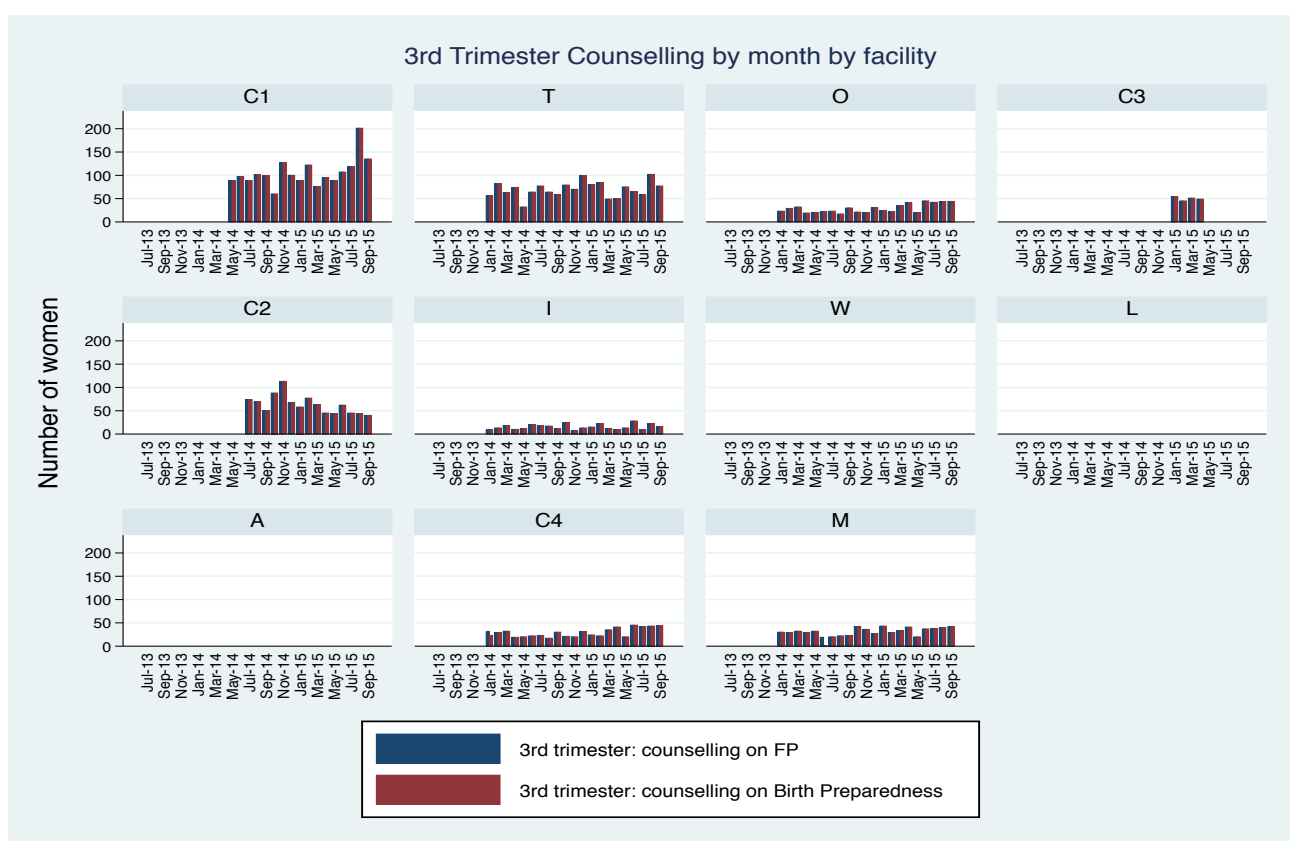
“But it doesn’t mean that we don’t know what to do; we know what to do but the workload it’s a problem, it’s a challenge. Uhh I almost knock off late almost every day. And you become tired, in the sense that sometimes you just see things and you are like aaa I should go and rest first.” (HFW₇)

Third trimester antenatal visits

In Ntchisi, some aspects of PPC, such as postpartum family planning and exclusive breastfeeding, are introduced during the third trimester antenatal visit along with counselling on birth preparedness and plans. This has been observed to happen in three cases where observations of ANC consults were possible. The monitoring data indicates that third trimester counselling on family planning and birth preparedness were always conducted at the same time (Figure 32), though this data is based on the assumption that

women were counselled at every antenatal visit in the third trimester as no separate records of counselling were kept. Therefore the true extent and quality of the counselling remains unknown. Data on third trimester counselling on breastfeeding was collected separately however, and shows that up to 2000 women per month were counselled at facility C1 in the first half of 2014 but that this then fell to around 500 women per month and very few were counselled in the other facilities (Figure A7.33, Appendix 7).

Figure 32 – Counselling on Family Planning and Birth Preparedness in Third Trimester, by facility by month, Ntchisi, Malawi



Delivery of immediate PPC

According to observations in all cases, women are sent to the postnatal ward shortly – around 15 minutes – after delivery. Women then stay in the postnatal ward for 24 hours but no physical assessment is performed at any point until they leave if no problems come up with the baby or the mother. At discharge, the HFWs gather the women that are ready to be discharged and give group counselling on the PPC possible danger signs, personal hygiene and baby's hygiene, umbilical cord care, exclusive breastfeeding, postpartum family planning at week 6 and finally women are told to come back after a week for a PPC check-up. Although this protocol has been observed in all cases, HFWs in Case 4 additionally take the

women's and babies' weight, temperature and women are asked about their bleeding. The lack of physical examination during the 24 hours women are kept after delivery was further confirmed by the women's and HFWs' interviews, as well as policymakers' interviews.

- " - How long did you stay in the postnatal ward from labour ward?*
- I did not stay long.*
- What care were you offered in the postnatal ward?*
- I did not receive any care not even the nurse coming to check or to greet us, good morning it all ended there in the labour ward.*
- How many days did you stay in the postnatal ward?*
- I stayed one day. (...) There was no procedure that was done. If it's time for ward round they will just come to discharge they will just ask if one is unable to move then they will say when you find strength you will go... There was no medication or help in other way it was not there."* (Woman₁)

"Giving the care here to a woman who has just given birth, it is like when a woman has given birth; she is taken out of here and she goes to the ward. She is told to wait there and they will come to see her tomorrow. So we stay there the whole day and when they come, they just tell us to feed the baby exclusively. Now about the care given to the mother, it's just telling us to take care of ourselves that's it. And when they come it's the same that we should be feeding the baby exclusively but they don't give advice to you as a women no. It's like that, and the time they come to round us [discharge]; that is the time they tell us about safe hygiene like taking a bath so that the baby should not get any diseases from the mother." (Woman₂)

- "- Ah... They just wrote out cards for us, that is all. They never told us anything, they just wrote some cards and told us, 'Come on Wednesday to show us the babies.'*
- They had not seen the baby?*
- Yes, they had not yet seen the babies. (...)*
- How about you?*
- Me. My body was also not examined. That is why I have come today to present to them how my body feels."* (Woman₃)

- "- So the woman delivers in the labour ward, how many minutes do you keep her in the labour ward?*
- Okay, like after delivery, you... you clean up the woman. It's less than 15 minutes.*
- Less than 15 minutes? So she's sent to the postnatal ward? How long will she stay?*
- 24 hours.*
- What happens when she's in the postnatal ward?*
- Nothing, honestly.*
- Nothing? She's just there?*

- *She will just wait for 24 hours to go.*
- *You don't even go there to check what's happening?*
- *No no.*
- *Like after two hours?*
- *(Laughs) No."* (HFW₄)

"Women are getting discharged after eight hours of delivery, and we don't see them until six weeks when they come for family planning, if at all they come; and yet we know that this is the period that women die. So we are doing something to the contrary, if we think this is the period that the women die, why can't we put something in place during that time? Even if you encourage the women to come and see you tomorrow, what is there, what are you really going to do? So this silent policy, unfortunately even the women hate it, if you stay... if you say, "Stay for another twenty four hours" they don't want, ya! Because they want to go home early! (...) I agree with them. Even if they stay in the hospital for 24 hours, what is it that you will do them to make them appreciate to say, "It was worth it staying here another night!"? The bathrooms are terrible, even the beds, sometimes they are sleeping on the floor. I mean they would get more infections than...compared if they went home straight! So we have to fix these little problems within our health system. (Policymaker₄)

Delivery of routine PPC

It was observed that more women in general come back for the PPC visit at week 1 than at week 6, when the turn-up is quite low. Women interviewed who came at week 6 did so for their baby's weighing and vaccination and, sometimes, for postpartum family planning but did not receive PPC check-ups. During field observations, it was found that HFWs do not ask or encourage women to come for postpartum check-up. Except in Case 4 where women are reminded of the PPC schedule up to week 6 and more women seem to be seen for PPC. As mentioned earlier, postpartum women are received after ANC, deliveries and FP duties are completed, consequently they have to wait several hours before getting the PPC consultation, that according to the observations, consist only in checking the umbilical cord and counselling on PPC danger signs, exclusive breastfeeding, vaccinations and family planning at week 6. Field researchers did not observe any vaginal exam in any cases during routine PPC consults.

"I do not think that six weeks postnatal check-up is still been done because I have been mentioning it but I don't think it is working since I came in February. At the moment I have not heard anything of postnatal care. It's difficult for me to mention." (HFW₈)



Nurse conducting a week 1 PPC check-up – September 2015

“Umh ...As I told you on the day duty you’re alone and when [postpartum women] come, let’s take that on that day your busy I don’t think you can review those mothers or give the quality care. Just because you are supposed to finish all the audience everyone must be assisted. So you do each and everything in a hurry or in a rush, so that you can finish each and every patient. I don’t think aah... care given can be of quality no!” (HFW₁₀)

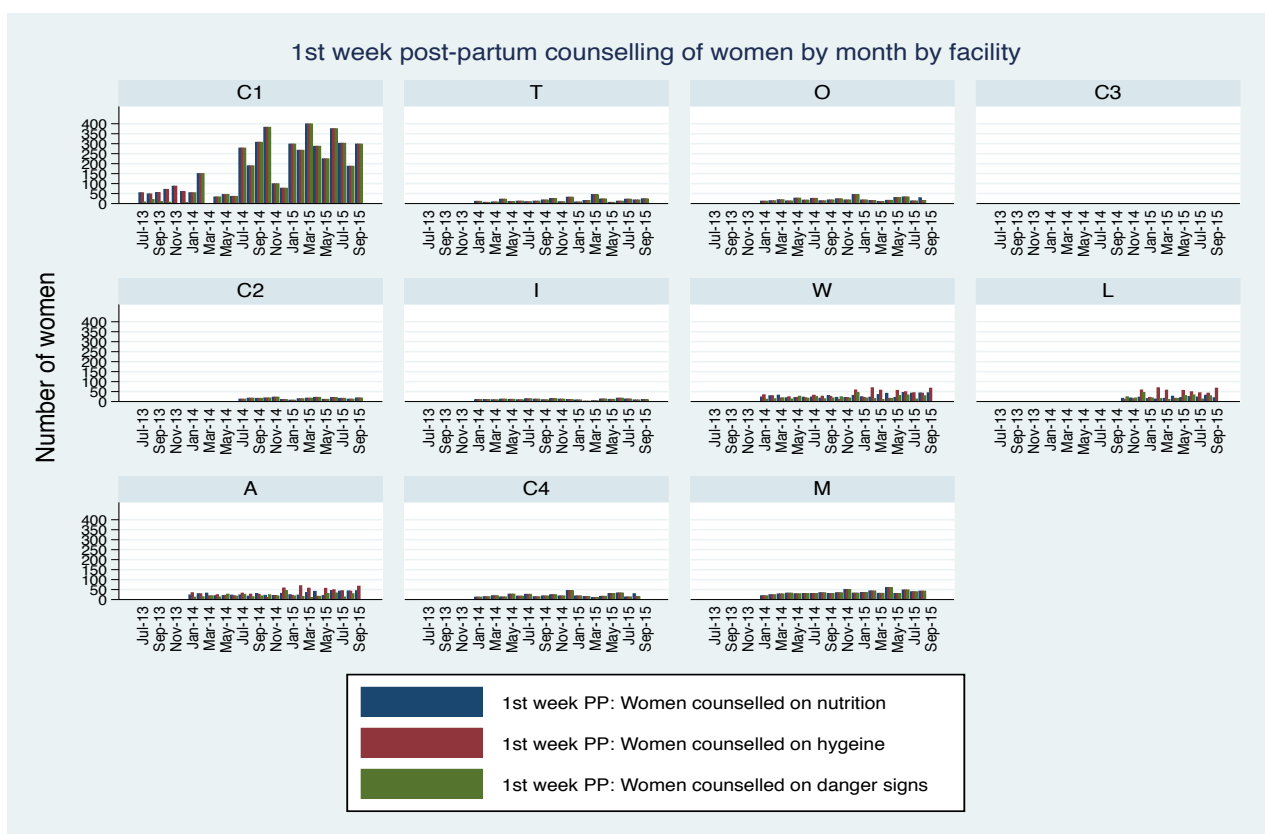
“The postnatal check-ups involved checking the umbilicus for healing and giving advice on danger signs for both the mother and baby without any physical examination for both the mother and baby. When the researcher talked to some of these postpartum women about their experience on this visit there were mixed reactions. Some felt that, that was the best the midwife could do because they understood that she was very busy while others were dissatisfied that all they could get was just having the baby’s umbilicus seen after a long period of waiting. These dissatisfied women further said that they wished they had not reported [to the HF] because the care they got was not worthy the long hours of waiting.” (Field observations)

“Well, for us, as long as [HFWs] have filled out the cards for the babies, what can we do... however, when we presented our complains, they were not able to respond to us in any way. I complained about my legs and my friend complained that she feels pains here [backache].” (Woman₃)

“[The nurse] just checks babies, then if there is any problem, he checks the mother, but if he sees that she is fine, he doesn’t check her.” (Woman₄)

The monitoring data for Week 1 post-partum counselling (Figure 33) indicate that nutrition, hygiene and danger signs counselling all took place at the same time, perhaps at discharge as indicated above. Contrary to the 3rd trimester counselling (Figure 32) there was a large increase recorded in July 2014 in C1, though a decrease again in November and December 2014 before high numbers around 300 per month or more again being recorded in 2015. The other facilities did not record much Week 1 counselling. As will all of the Malawi quantitative monitoring data, the reliability of this data is uncertain.

Figure 33 – First Week Postpartum Counselling, by facility by month, Ntchisi, Malawi



As part of Intervention 1, three PPC visits were added to the visit schedule: at months 3, 6 and 9. However, field researchers did not observe any women coming for PPC after the 6th week.

Impact of Intervention 1

From interviews with HFWS, it would seem that the impact of Intervention 1 on the delivery of PPC has been quite limited. Several HFWS mentioned that they did not observe much change in PPC delivery besides the fact that women receive counselling before getting discharged when they deliver at the HF and that women are now receptive to family planning.

"Previously we could not even counsel them. We could just discharge them, off they go home. Now we counsel them." (HFW 2)

"I don't think so, maybe to those who are in-charge of the figures, but to me, I have not noticed any change since I started work, it is the same. However, many women now know the importance of going for family planning methods; they know about child-spacing, they know how to give nutritious

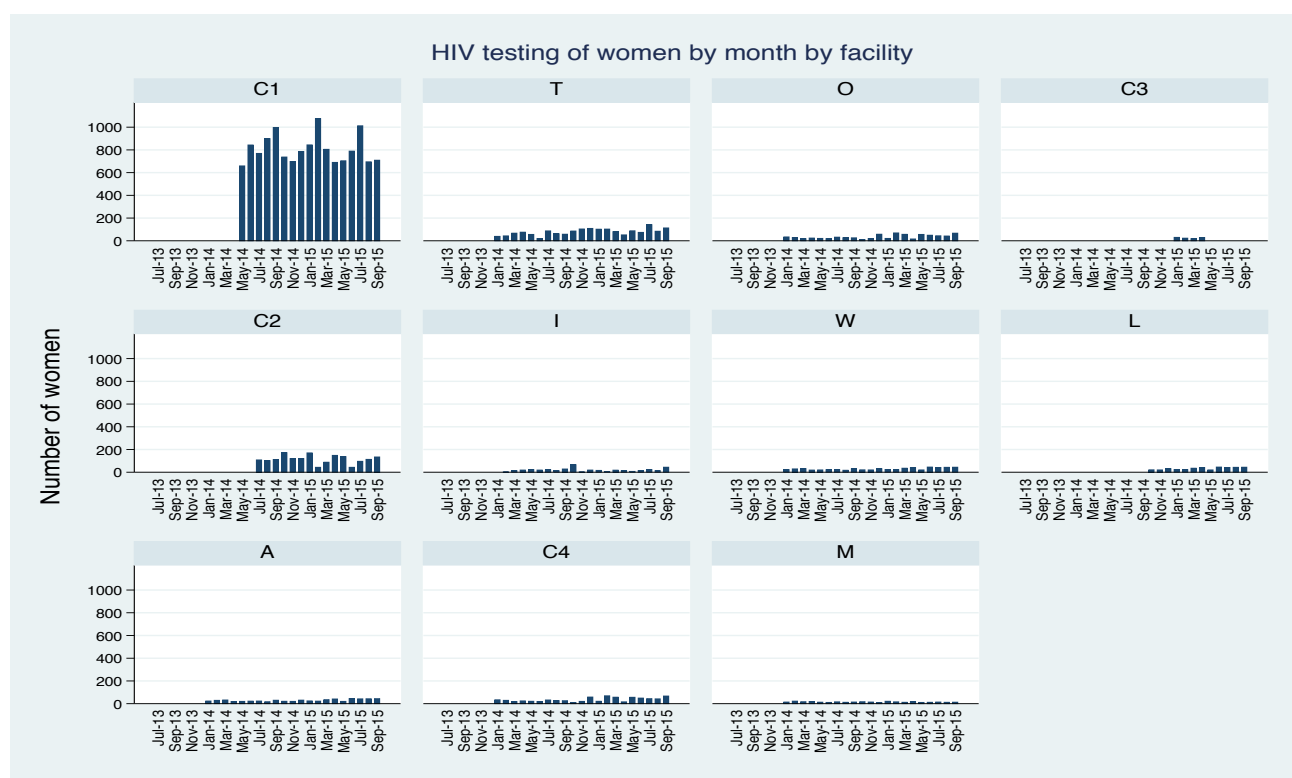
diets to their children, taking care of the child at least that knowledge has crept in.” (HFW₅)

Intervention 1 focused in particular on improving secondary PPH, sepsis, anaemia, HIV screening and management, nutrition counselling, sepsis and pneumonia diagnosis and management for infants. The quantitative monitoring indicators data was inconsistently recorded for postpartum anaemia, sepsis and HIV diagnosis and management (Figures A7.21, A7.22 and A7.23, Appendix 7) so we are unable to draw any conclusions as to any impact MOMI intervention 1 may have had on these outcomes. Given a lack of qualitative data supporting MOMI-related activity toward improving these outcomes it is more likely that MOMI did not impact on these outcomes.

The proportion of women recorded as having a nutrition check and counselling was also likely to have been inconsistently recorded across facilities and over time as the data varies widely and there are many months with missing data and for three facilities data was not recorded at all (Figure A7.25, Appendix 7). Given that the number of women with abnormal BMI (<18.5 or >25) was not recorded in the facilities where nutrition check and counselling data was recorded (Figure A7.26, Appendix 7) it is also not possible to conclude anything about the targeting of such women. Infant growth monitoring and nutrition data (Figure A7.28, Appendix 7) and complementary feeding counselling data (Figure A7.29, Appendix 7) was similarly not recorded obscuring the possibility of concluding anything in relation to infant nutrition efforts either. The same goes for neonatal sepsis, where the data is also sparse (Figure A7.27, Appendix 7). Data on infant pneumonia seems to have been incorrectly recorded in a number of facilities with infant deaths from pneumonia equalling the number of infants with pneumonia and infants with the pneumonia protocol having been followed also matching the number of infants with pneumonia (Figure A7.30, Appendix 7) suggesting that no separate or verified data collection took place for these indicators.

The number of women tested for HIV is shown in Figure 34, with data from most facilities from June 2014. Facility C1 tested the vast majority of women, at around 800 women per month, more than the other 10 facilities put together. Apart from a few peak months, the numbers do not appear to change much suggesting that the MOMI interventions may not have impacted on this indicator. This is perhaps not surprising given that the qualitative data does not indicate HIV testing to have been a specific focus of MOMI activities in Malawi.

Figure 34 – HIV testing, by facility by month, Ntchisi district, Malawi



Although immunisation counselling data was recorded in many facilities, the number of babies fully immunised at 5 months of age was only recorded at facility C1 during the last year (Figure A7.34, Appendix 7), making it difficult to assess any impact of such counselling. The available data suggests the number of women counselled on immunisation for the baby did not vary much over the evaluation time period. Available data on warmth counselling tells a similarly unchanging story and again there is a lack of data – in this case none – on the associated outcome: babies with hypothermia (Figure A7.35, Appendix 7), making it impossible to draw any conclusions on the outcome of such counselling. The data on hygiene counselling and neonatal sepsis (Figure A7.36, Appendix 7) is similarly inconclusive. Facilities C1 and C2 have data on both baby danger signs counselling and baby complications recorded for some months (Figure A7.37, Appendix 7). This data suggests a slight increase in counselling from September 2014 but also a possible increase in the numbers of babies with danger signs in facility C1, and a slight decrease in counselling in C2 and no change in babies with complications in that facility.

5.4.3 Motivations of HFWs to provide PPC

A general feeling of demotivation arose from the interviews with HFWs, which impedes the delivery of PPC. Some HFWs mentioned that they are unhappy with the location of the HF they have been assigned to, especially for the HFs in rural areas.

"The fact is people prefer an area where there are places of entertainment, market, and even socially. (...) Many people enjoy phones nowadays but there is no network, road or market here. So these are barriers." (HFW₇)

"There are certain reasons why am here, yah but am not motivated to stay here anyway, there is nothing that motivates me to stay here, yah." (HFW₁₁)

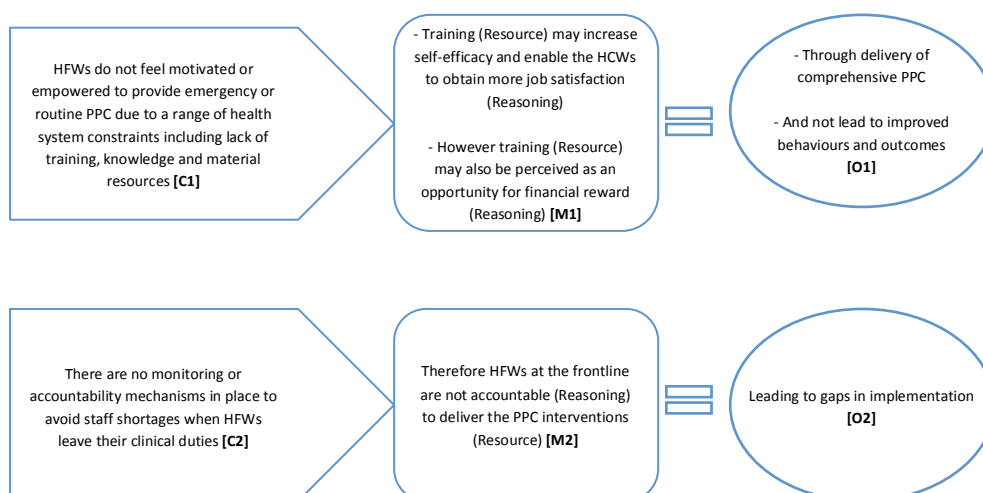
Several HFWs, not working at the district hospital, further explained that they have been assigned to a small HF and have to provide midwifery services when they would rather be posted at the hospital where they could be doing general nursing instead.

"Personally I don't like delivery and stuff but because I'm here, I will not run away from it. I just have to do it. But I remember when I was at DHO, I usually said I don't want to work in the maternity. There people will usually run away because of the maternal deaths, because there it's more." (HFW₄)

Finally, as mentioned before, the workload at the HF is too overwhelming for HFWs, demotivating them from implementing and delivering the MOMI interventions.

"I may say there's no dedication because of no motivation. We are not motivated to do things. When you're tired you will say I'm tired, I will not just leave it. As long as I have done ABCD, the rest I can't, so I leave it." (HFW₄)

In conclusion, HFWs do not feel motivated or empowered to provide emergency or routine PPC due to a range of health system constraints including lack of training and knowledge (Context 1). Training (Resource 1) may increase self-efficacy and enable the HFWs to obtain more job satisfaction (Reasoning 1) through delivery of comprehensive PPC (Outcome 1). However as we have seen, training (Resource 1) may also be perceived as an opportunity for financial reward (Reasoning 1) and not lead to improved behaviours and outcomes (Outcome 1). Furthermore, there are no monitoring or accountability mechanisms in place to avoid staff shortages when HFWs leave their clinical duties (Context 2). Therefore HFWs at the frontline are not accountable (Reasoning 2) to deliver the PPC interventions (Resource 2), leading to gaps in implementation (Outcome 2).



5.5 Increasing uptake of family planning

5.5.1 Provision of FP at the HF

Women are counselled on postpartum family planning, according to the HFWs, during the third trimester antenatal visit, at discharge after delivery and when women come back to the HF for their babies' vaccination. However, the comprehensiveness of this counselling is arguable and it was observed on several occasions that women have to request a family planning method themselves without being counselled.

"I see that the problem is the large number of women, because it needs to go like, once you have done the group education, you also need to do individual counselling. However that time the counselling is not there. But if the people are told about the family planning method, like the effectiveness, advantages, disadvantages, effects and dangerous signs, I think it could be better. But with the problems of resources, we just choose to use the shortcuts." (HFW₉)

The main barrier to the provision of family planning is the lack of skilled HFWs. Three quarters of the HFWs interviewed are only trained in providing pills, condoms and Depo-Provera injections and cannot provide long lasting family planning methods. Therefore according to the interviewees and observations HFWs rely on NGO staff to provide the family planning services at the HF and in the community. Consequently, given the limited number of HFWs who can provide long lasting methods, women have to wait a long time to get the services and might as a result leave without FP or switch to a Depo-Provera injection.

“What I don’t like is the provision of the services on family planning because I can give counselling but I cannot provide the services to the maximum to the women so I hate it. It is because there is a big knowledge gap of me knowing a lot about family planning methods” (HFW₈)

“And maybe the other thing can be technical expertise, the capability to insert it; am sure that the people from MCH have not yet been trained on how to insert IUD, yah.” (HFW₉)

“The time they are waiting for that method... because other methods are being provided by few staffs. So they have to wait for that staff to come the next time of which can also contribute to... to... other unwanted pregnancy because the mother could not access the family planning method. This can also result in the mother taking the method which she was not supposed to take.” (HFW₈)

Family planning monitoring data was only recorded from 4 of the 11 facilities in Ntchisi including only one of the case study facilities (C4). The data show an increase in the number of women using FP in facilities O and M (facilities anonymised, Figure A7.24, Appendix 7), though given the numbers are much larger than the numbers of women delivering in these facilities in some months it is unclear how much of this is postpartum family planning. It is also unclear how much of these increases could be linked to MOMI activities, especially given the qualitative data above indicates that family planning was not focused on much. Figure A7.32, Appendix 7 does report data on postpartum family planning for some months for some facilities. The available data does not suggest any increase. Only facility T reports postpartum intrauterine device insertions (Figure A7.32), but at around 250 insertions per month these figures are not realistic, or corroborated by other data sources.

5.5.2 Women’s perception on FP

In the community, demand for PPFP was to be increased through sensitisation meetings, dialogue sessions but also through the recruitment of community based drug administers for door-to-door distribution of FP commodities in partnership with the Clinton Health Access Initiative. Although 23 administers were recruited and trained in November and December 2014 (see timeline in Appendix 2), nothing further was implemented therefore this activity had no impact on women’s perception on FP.

Participants interviewed noted a change in recent years with more women seeking and accepting family planning and child spacing messages; the most popular FP method being Depo-Provera injections.

“A lot of people have just gotten tubal ligation, those who have three, four children, are coming to get tubal ligation.” (Woman ₄)

“Family planning, people have seen the goodness. Because when they do family planning women are healthy for not giving birth every year and they are strong. They are able to work in their farms and homes, because when a woman has many children she cannot be free to participate in development. Performance is low even at home because she has to share time with the many children.” (Woman ₅)

“In my village, beliefs concerning family planning are that currently, a person believes that family planning is good; because our elders may stop us from using family planning methods, saying that they were not using the methods, but we do not accept just to stay without using family planning. We’ve really been encouraged; even if they stop us, we do not obey. (...) The reason is, we cannot manage to be bearing children yearly as they used to do in the past. What they used to do then, is different from what is happening now, we are following how the world is going.” (Woman ₆)

“I think there can be a change in family planning, a lot of women are now using contraceptives, whilst before not many were using. Now people have got a picture that if they have four kids they can go for tube ligation, they do come seek counsel from us as CHW. We do counsel them because we don’t offer that service at community level so there is change that people can chose to have less children than before.” (CHW ₁, Health Surveillance Assistant)

“More women accept and demand for long term PPFP. And there is increased uptake of long-term family planning methods. So here more women are going to the facilities to seek family planning methods.” (Participatory Evaluation Workshop participant)

However, there are still many women who refuse PPFP because of rumours they have heard in the community and thus fear for example side effects of contraception, fear of becoming sterile or fear of becoming unable to satisfy men sexually if they use family planning. Additionally, women need their husband’s permission to receive family planning, which can turn into a barrier to uptake unless women are willing to do family planning secretly.

“Maybe wrong information, maybe somebody used the method, she had some side effects, and she can’t encourage a friend to go for the method. I’ve

overheard some women saying that you no longer bear children and of which the uterus becomes sterile.” (HFW₁)

“I had fourteen injections [doses of Depo-Provera] and people talked many things; they were saying you will become sterile, I said I will have children. They said liar, you have had too much injections. When I stopped using Depo-Provera, one year passed and the second year I got pregnant of this baby. Does that mean I was sterile? I have been through that and nobody can cheat me again.” (Woman₇)

“The common challenge that I have seen is the same cooked up stories. Because [women] are having a lot of misconceptions. They will say it will go to the heart so you find that today it’s been inserted, then tomorrow she comes saying I want it removed because I’m feeling this and that. Sometimes they will say things which are not there because they are afraid something will happen because someone had told them.” (HFW₄)

“Some men say women when they take Depo [Provera] they are cold [not aroused]. (...) Some women say if I will use Depo I will dry up and I will not be able to conceive.” (Woman₁)

“He [the husband] was saying that we should be having children. I was getting the injection... but this was causing quarrels in the home every single day until I had another baby.” (Woman₃)

“I think the men are still behind they are lacking, it’s only a few men who can encourage their wives to take family planning methods or to do sterilisation. Most men have not yet started believing this they are still telling their wives to be giving more births yet a few are encouraging their wives to practice family planning and even to sterilise. (...) Some say taking family planning the person gets cold [not aroused] so to them they will not allow their wives to do even sterilisation that’s what they believe in that the women will be cold and since the woman doesn’t want to be cold she will not go for family planning.” (Woman₈)

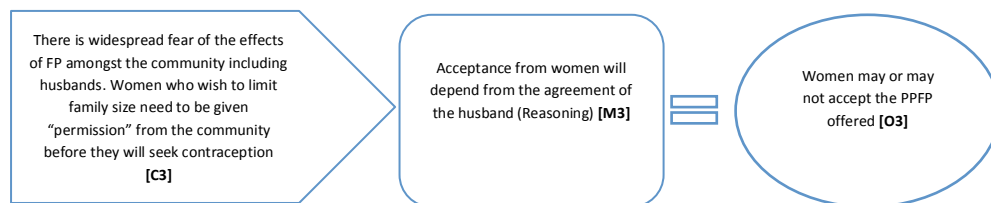
"The first [barrier] could be lack of male involvement because we are talking about issues of decision making dynamics. If there is no male involvement starting right away from antenatal care for the woman to utilise the postpartum family planning it is difficult because she relies upon the male counterpart to have the final say on postpartum family planning." (Policymaker₃)

“Some say, it’s easy [Depo-Provera] has few complications; others maybe they may want the long methods, but they choose this maybe to run away

from their spouses so that they should not know they are doing any family planning.” (HFW₁₂)

“Currently, many people say a lot of men refuse family planning, but when we go to the field, in reality it will be found that maybe are not the men refusing; maybe women believe that once they do family planning the husband will be having extra-marital affairs.” (CHW₂, Health Surveillance Assistant)

For these reasons, there is widespread fear of the effects of FP amongst the community including husbands. Women who wish to limit family size need to be given ‘permission’ from the community before they will seek contraception (Context 3). Acceptance from women will depend from the agreement of the husband (Reasoning 3), thus women may or may not accept the PFP offered (Outcome 3).



However, given the limited implementation of MOMI interventions, the barriers to provision and demand of FP and the large number of NGOs providing FP related interventions at HF and community levels, it is not possible to assess the link between the progressive change on postpartum family planning perceptions and MOMI.

"Participant: I wonder why MOMI should celebrate on uptake of FP methods and related, while there are other partners who are advocating for the same.

MOMI facilitator: The achievements in postpartum care outcomes are a result of concerted efforts from all stakeholders in Ntchisi district.” (Participatory Evaluation Workshop)

While husbands may be a hindrance to family planning uptake, it is interesting to note their involvement at the HF with other aspects of maternal care. For example, as a result of a national policy men are required to be present during the first ANC visit, a fact witnessed during field observations where pregnant women coming with their husband to the HF are attended to first.

“So, at the moment more men are now coming because if a man come together with his wife during the antenatal visit, the woman is given first priority to be served. First of all we serve those women that came with their husbands. Then we do group counselling, so, the husband and the wife are

now served. Their perception is that they are saying previously they did not know much, but due to these visits, they are learning more. And they are happy about that.” (HFW₂)

“If a pregnant woman does not have a partner she needs to come up with a documented proof from the chief in order to access services. It was further reported that women reporting for antenatal services without a partner are either sent back home or served last.” (Field observations)

“It was painful; because like when you come with your husband, you do not take too long, after a short while, you would be attended to and go back [home]. But when you come alone, it was like you had to be on the sidelines!” (Woman₃)

In some cases, it was also noticed that some husbands were present in the postnatal ward with their wife and newborn. There is therefore potential to involve men in other aspects of maternal and child health (MCH) such as family planning and PPC.

5.6 Strengthening community postpartum care management

5.6.1 Implementation of MOMI activities in the community

Gaps in implementation

Intervention 3 aimed to recruit female volunteers to conduct home visits to postpartum women and sensitise them on issues related to PPC in three traditional authorities (communities). These volunteers – managed by existing Health Surveillance Assistants (HSAs) – were also to form women’s groups to discuss maternal and infant health problems according to a five-phase participatory learning and action cycle. Phase 1 focused on ‘learning together’, phase 2 on ‘identifying and prioritising maternal and neonatal health problems together’, phase 3 on ‘planning together’, phase 4 on ‘acting together’ and phase 5 on ‘evaluating together’. In addition, men and adolescents were to be recruited to form respectively men’s and youth’s groups following the same action cycle than women’s groups. However, implementation was very limited as it focused on one traditional authority instead of three and implementation of youth’s groups never took place. Consequently, field researchers were only able to conduct community observations in two cases, as the other two did not have any MOMI interventions implemented in the communities served by these two HFs.

According to the implementation timeline (Appendix 2), the first part of the MOMI volunteers' training was only delivered in August 2014 and the second part in June 2015. Because of the long period of time between trainings MOMI community volunteers interrupted their group activities as MOMI volunteers were waiting for the second part of the training.

"But [the work with groups] has not been consistent. Umh... We stopped working for some time in the process because there was no work. Our scheduled meetings that we were trained were over and we had nothing to do in our meetings with the community so we were waiting for the other training to add on what we should be doing. We have just resumed recently after the trainings. (...) The meetings we were trained on it was four. Umh...when all trainings are thirteen in total. So we were waiting for the other trainings so that we can be trained in the other schedules." (CHW₃, Community Volunteer)

"I cannot say much about MOMI in Ntchisi. What I know about MOMI is a bit of old information from the early days of its introduction in Ntchisi. So, I would not be in a position to tell you the latest MOMI information. I can only say that MOMI has done little in Ntchisi. (...) I have already said that MOMI did little activity here, and if I go to the community, we see that MOMI left many appointments unfulfilled, they could only promise that they are coming without action for instance to the HSAs, or training in this or that, but never did, those issues are still standing up to date. (...) And much of the effort is done by the other partners [other NGOs and programmes] yes. I should think MOMI was more in the office than in the community (laughs). They spent a lot of time in the office." (CHW₄, Health Surveillance Assistant)

"In the first training we had a chance to be trained in a number of sections to follow when entering the village, how can we search for problems, and how we can arrange them. There were other sections that were supposed to continue but there was a problem that we did not, regarding the time that was allotted to the training. (...) Therefore, regarding this project, we can say nothing has happened to the part of refreshers, because we can say since we had the first training we were supposed to evaluate how it has worked, but then there is no such a thing, it's like we just added another material. (...) Here, [the change is] fifty-fifty it is the one that I've talked about like problem searching, finding solutions to the problems, that is really happening, and as I've said, we were supposed to continue, but it's like we don't have knowledge of where to go, since the other methods that we researched, it's like we did not continue with them because we needed further steps to reach an extent of tracing the problem from its cause to a solution, to complete the whole cycle. (...) Because if I have been given limited skills to reach the people, then, my actions will also be limited." (CHW₅, Health Surveillance Assistant)

In addition, the interrupted trainings were combined with a lack of supervision: four supervisions took place according to the implementation timeline (Appendix 2) during which not all MOMI volunteers and HSAs were supervised. CHWs have brought up the issue, as they did not feel supported by the implementation team.

“But when we reported to the [MOMI] program of our challenges they showed no interest so we all lacked encouragement, including the community facilitators.” (CHW₁, Health Surveillance Assistant)

“To work effectively, I feel our work can improve mainly if we receive encouragement from the officials from MOMI. If they can encourage and help us through meetings, mainly we could add skills and do our job effectively. (...) The officials should be helping us in some other thing because we can be going visiting women in their homes. We can’t keep telling the women about the same issues all the time we visit. So if we meet with the officials they will be updating us with other knowledge and skills for us to impact the community.” (CHW₃, Community Volunteer)

“My comment is that you should encourage us just like you have done so that what we have done should not be in vain, otherwise if you do not visit us, then we will backslide. But if you visit us frequently, then our work will progress and we will also work hard in our field.” (CHW₆, Community Volunteer)

Community group meetings

Several CHWs interviewed who are facilitating the women’s groups mentioned how difficult it is to get women interested and involved and that the turn up is quite low. Field observations of such a meeting showed that the majority of the group was two hours late and that eventually, only 5 members showed up.



“Some people are too busy to come to the meetings but others it’s just lack of interest. They feel it is not important... They say they have been delivering for a long time and somebody today should tell them how to take care of a baby it’s useless. So these kind of people who are not interested are the ones who discourage those who want to come to the meetings.” (CHW₃, Community Volunteer)

Women’s group community action cycle meeting – July 2015

However, field researchers observed two other women's groups meetings during which participants were active and the turn up was high. CHWs attributed this participation levels to the involvement of the chiefs.

"The MOMI community groups are well structured in this community as it was observed that the group has a chairlady, secretary, treasure and members. The facilitator makes sure that all the members do participate in the discussion. It was observed during the meeting that the members present were over 30, which is a good turn up. The HSA was asked of the mechanism she used to convince the women to participate, as it was difficult before. The HSA reported that she just involved the chief and when the chief called the women and talked to them it resulted in good participation in the MOMI community groups."(Field observations)

"The meeting went well as there was more interaction between the community facilitator and the participants. (...) It was helping women to understand more and be able to apply the knowledge captured during discussion. Women were empowered after discovering that some services are not done as they are supposed to be done by the health workers at the health facility and were empowered to ask for the postpartum care services if not accessed as they learnt it from the women's group. (...) The community women group was well structured as it has all required position for a group to run and also the senior chief, who is also a woman, is a member of this group. This acts as a motivator to the rest of the women in the community." (Field observations)

Home visits

CHWs interviewed reported on the other hand more acceptability from women to receive home visits than to participate in women's group. CHWs use guidelines provided by MOMI PACHI to guide their home visits and do not seem to encounter any specific difficulties. However, CHWs interviewed were usually confused when asked about the home visits schedule. There is no monitoring data to confirm the frequency of home visits but it would appear from the interviews that no visits are conducted beyond six weeks postpartum.

"When the woman has just delivered we are supposed to go and visit the woman and talk to her using the guidelines in the book we were given to use. The guidelines help us to know what to say the things needed for that particular visit... umh... so we explain the care. (...) There are no challenges when home visiting the mothers. The only challenge comes when we have to meet to talk about our work [women's group]. Usually there is very low turn up." (CHW₃, Community Volunteer)

"When a woman has just delivered, we have...I can say a chart which assists us in terms of guidelines which help us. Mainly, we find out the problems that

a woman faces when she has just delivered. So, following that, we may chat with the woman, we ask her if she has a problem. We also explain the examples of problems that women may face after delivery, and then we ask if anything of those is happening to her; so, sometimes she may accept that since I delivered I am losing blood; I am also not able to produce enough breast milk, the baby is not sucking adequately. So, following such strategies, it's found that we've chat with the woman and established whether she has no problem, or she has a problem so that we send her to hospital immediately.” (CHW₅, Health Surveillance Assistant)

Home visits are accepted by women according to HFWs but there is not enough data from women's interviews to corroborate this as most women interviewed were not visited by a MOMI CHW. A couple of CHWs mentioned that there is a protocol to follow when arriving in someone's home to make sure the visit will be accepted, which consist of greeting the husband first and ask for permission.

“Now when we visit the women in their homes, the women talk to us without reservations. (...) I think they know that this is important. When we visit them, we don't just give the information from our heads, they also contribute saying they are also helping the woman. If there are problems, for example, body hygiene, they will point it out. Umh... So we work together with the family members by encouraging them to be helping the woman since they are the ones who are closest to her. They should tell her to bath and also to give the baby a bath. Umh... They accept it without problems since they know we are all working together to help the woman.” (CHW₃, Community Volunteer)

“Firstly, there is procedure for arriving at the woman's household, because when you just arrive without following the procedure it can cost your work. For, example, I am a man and I am visiting a married woman, then I am supposed to make a proper communication before visiting the household. When I arrive at the household, I should not just start chatting with the woman before knowing if the husband is there, if it doesn't require presence of the husband, I should request him to excuse us for a short period of time regarding the topic of the chat; or he may need to be there to listen to what we are talking about. When we do that, there are no suspicions, because we belong to different sexes so sometimes the husband may think I just go there in the name of health advisory yet I also like his wife, which is not the case. So, if you don't follow proper channel when visiting a household, you end up ruining the image of your work, sure.” (CHW₅, Health Surveillance Assistant)

“So, I see that the people who mostly welcome [community] health workers are women. The other thing that makes a healthcare worker to be received is the people in the village; you are supposed to build trust so that the people trust you. So, first you have to create a good reputation for... For yourself as a

[community] healthcare worker so that you work properly with the people; because let's assume that you are popular with having extra-marital affairs with married women, once you arrive at a household, the first thing they will think about is you will propose love from their wives. But if you don't have any womanizing reputation, they trust you. So, building trust is ones task, so that the people to develop trust in you, that's why they receive us." (CHW₂, Health Surveillance Assistant)

Here again, CHWs mentioned the importance of involving community chiefs to facilitate their activities in the community.

"What makes [women] agree [to home visits]? At the beginning when MOMI started... Umh... We called the village headmen. They in turn told the health workers that we have been selected from different villages to be working with women. The village headmen also notified their community people so that when we visit them, they are not surprised since they know why we are there." (CHW₃, Community Volunteer)

"As I said at the beginning that mainly we work with chiefs. So, you can't just enter the village without notifying the chiefs about your aim. So, when we arrive our first contact are the chiefs who know that the work of [community] health workers is to visit people in their homes. So to us, when a woman becomes pregnant the chiefs may know, or everyone knows that being visited by a [community] health worker, is not a surprise; so, it's like a relationship was already established because of this programme." (CHW₅, Health Surveillance Assistant)

"What we do is that the day before the home visit, we first of all send a message to the chief and everyone we expect to visit their home, so that they should not be taken by surprise and wonder what we are doing in the village. We first inform the chief, saying, 'We would like to meet the women on such and such an issue' and they say, 'come!' They also inform those people that, 'Tomorrow people from the hospital will come and discuss about such and such a topic and so no-one should not go out.'" (CHW₆, Community Volunteer)

Role of the community leaders

Therefore involving community chiefs was important as it facilitated the implementation of community activities. Indeed, many CHWs agreed that for change to happen in the community, chiefs must be involved.

"The chief is the highest rank, people do listen to him. Even I can go and say something nothing will be done, but I the chief says it, it will happen without problems." (CHW₁, Health Surveillance Assistant)

“If the village headmen are not involved in the changes, things will not change in a community. They are the ones who communicate properly to the people when organisations come here.” (CHW₃, Community Volunteer)

“We have been in the villages ourselves so when the chief call the community everyone listens. Unlike when they are called by a health representative.” (HFW₁₀)

“More especially if it goes through the chief, that is not a problem. People accept issues easily especially when these go through the chief.” (CHW₆, Community Volunteer)

“Because if the chiefs can encourage women on maternal and neonates health issues and the health facility is involved in the community there is impact. Because it’s like the community has already been told by the chiefs first before coming to the health facility. So the health worker will find that the women at least they know something from the community. The women do comments that the chief also shared the same issue on maternal and neonates health.” (CHW₇, Health Surveillance Assistant)

Chiefs are already involved in issues related to maternal care. All community participants explained for example that the chiefs have established a fine for women delivering at home in order to promote institutional deliveries, hence why most women now deliver at the HF. However, women are going to the HF out of fear and those who do not make it to the HF are afraid to come to the HF after delivery because they do not want to pay the fine, which might hinder delivery of PPC for a minority of women.

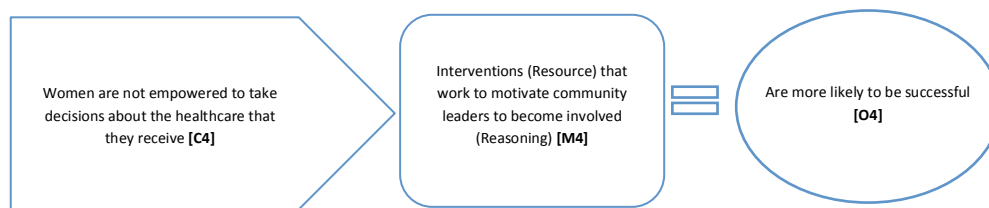
“Women are scared because they are still in pain when they are being examined in the private part. Because the midwives go deeper than the vaginal examination of the first time. So women are afraid to deliver at the hospital they don’t want to be hurt. But because of the introduction of the law they try to come despite that to deliver at health facility, because they are afraid of being fined a goat or money.” (Woman₁)

“What made me deliver at the health facility is the policy that is in place that a woman should not deliver in the community but at the health facility because there might be problems like loss of blood, or high BP. So at the facility they do check all that and they care refer to the district hospital whilst in the community they will not do that.” (Woman₅)

“Because of the various messages and agreement with chiefs that once a woman delivers at home, there is a punishment that is given to the family.” (CHW₅, Health Surveillance Assistant)

“The chiefs and their communities to intensify this they have put a fine to all women who delivers at home all on the way to the hospital. The fine is paid at the hospital so a lot of women are afraid of paying this so once they deliver home they will not come to the facility. They opt to be home still.”
(CHW₇, Health Surveillance Assistant)

Therefore, women are not empowered to take decisions about the healthcare they receive (Context 4). Interventions (Resource 4) that work to motivate community leaders to become involved (Reasoning 4) are more likely to be successful (Outcome 4).



Relationship with the HF

HSAs have a formal relationship with the HF they work for, as they are formally recognised in the health system and are paid by the government. HFWs therefore describe a good relationship with them but it is difficult to tell, given the limited implementation of intervention 3, whether the HFWs’ statements encompass the MOMI community volunteers as well.

“The relationship is good because we are interdependent; we depend on them, they also depend on us. Mostly they identify cases there, maybe they have seen case that the woman needs hospital delivery, they will encourage those, especially HSAs.” (HFW₁)

However several CHWs indicated that there are problems when referring women in the community to the HF. Firstly because they do not have a formal form to refer women and have to refer them verbally. Secondly when women referred do not receive appropriate care at the HF, which can compromise the trust relationship between the CHWs and the women. Additionally, there is no monitoring data to indicate if referrals do take place.

“Currently, as I talked about sending patients, we do send them but it’s like we just communicate verbally. But if we could have the forms properly, they could help us keep the records. Of course we meet and there are reports and currently I can tell you the truth that we’ve worked for MOMI project; but if you ask us to give you a written report with a proper format, we will not be able to give one, because they did not even give us the forms and the like, it’s like just teaching a person and tell him to start working. So, instead of being

able to see what you did in 2014; or sometimes you may just compare, I had this problem. (...) That's the follow up that can help us see that things are changing. (CHW₅, Health Surveillance Assistant)

"When the people have been referred from the community to the health facility, they are received the same as people who are not referred and then at the facility they take long without being helped or attended to. They feel there is not enough care at the facility. Because they are being told or referred by the community facilitator to seek help when they have a problem. Sometimes women go back without proper care, in the community they start complaining to the one who referred or told them to go to the health facility that you have just troubled me with the traveling I went to the hospital but see I have come without any help. So there coordination doesn't exist between the community facilitators and the health facility. (...) I don't know the problem, because I didn't know how the programme of the training was arranged. Had it been this was well taught during the programme maybe it could have been better. So I don't know how the programme was in the first place." (CHW₁, Health Surveillance Assistant)

Motivations of MOMI community volunteers

Field observations indicate that the workload of MOMI community volunteers is high and activities are conducted with no incentives provided to them. The data collected during the end-evaluation does not shed light on the volunteers' motivation to conduct their activities, given the limited implementation and, as mentioned before, given the fact that community activities were stopped while volunteers were waiting for training. However, during field observations, it seemed that the presence of several organisations involved in promoting MCH (including PPC) is demotivating MOMI volunteers as they can see other organisations do provide incentives to their community volunteers.

"Maikhandā, BLM, PSI, World Vision International and Red Cross are among the NGOs which are implementing community and facility based projects that promote ANC attendance, facility-based delivery, family planning and PPC uptake. (...) MOMI community volunteers reported that they slowed down on their work because they did not receive incentives while their colleagues who are working on similar activities with other NGOs received bicycles, bags and t-shirts." (Field observations)

"If the agriculture people come, they pick the same [community volunteer], the Red Cross will come and pick the same person. Ministry of Health will pick the same person. So s/he compares, when I was with the Red Cross I was getting maybe five thousand per day for my lunch and accommodation and whatever. When I am with MOMI I am just getting this." (Policymaker₂)

To test our programme theories around the motivations of CHWs, it is necessary to have a certain degree of implementation, a condition not met in Ntchisi district. Several CHWs and some women speak of a change taking place in the community – with more attendance to the HF and less maternal and neonatal deaths in the community. A change however that is unlikely to be linked to MOMI given the limited implementation of community interventions and that several organisations are also working in the communities to promote safe motherhood.

“In terms of NGO work let me give credit first to Red Cross and MaiKhanda. These NGOs are serious with their work and if you were talking about the changes in postpartum care it is because of these two NGOs. There are also other NGOs like World Vision, World Relief and MOMI, I think we can do without these three. (...) But should Red Cross or MaiKhanda phase out their projects, we shall have to sit down and discuss the possible way forward.”
(CHW₄, Health Surveillance Assistant)

5.6.2 Women’s demand for PPC

Motivations of women to attend the HF

Women’s main motivation to attend the HF revolves around the infant’s care, in particular vaccinations and growth monitoring. The infant is the priority and almost no women interviewed mentioned her own wellbeing in the interviews (except for the benefits of family planning on their health). As a consequence, if there are under 5 outreach clinics taking place in their communities, women will tend to attend those clinics where they can receive vaccination and growth monitoring for their baby instead of going to the HF where they could also receive maternal health services.

“What will encourage the women [to attend the HF] is the gift of the baby that the baby should be taking to the hospital for care for the baby to grow well and healthy. (Woman₈)

“One factor is laziness, yah, negligence that I can’t go there. Yah, that’s what hinders a person from going to receive treatment, especially the laziness we are talking about.” (Woman₆)

Several HFWs further mentioned that women will not seek care for themselves if they feel fine, a trend that was also noted during field observations.

“I feel when [women] are okay ...when they feel there is no problem, they see no need why they should still come for a check-up. For them, if they

come for the family planning services they are okay. I think that's the mentality that has been there." (HFW₄)

"The other reason is that [Case 2] has a long and a wide catchment area. Some people come from very far places so to say we discharged them today and after a week they should come again for check-up is a challenge. When they have a problem that is when they come but if everything is normal, they don't come they just stay at home." (HFW₁₀)

Important elements raised by participants that will motivate women to attend the HF are: the quality of care received, the attitude of the HFWs and the waiting times at the HF. Unfortunately more often than not, these conditions are not met according to participants (including HFWs) and field observations.

"When others hear that people are received warmly, that's when they become attracted to come here [the HF] to receive this care." (Woman₄)

"Out of 98 deliveries, less than 20 women will come for check-up. So I think some, it's the distance. They need to travel a long distance and for them when they see the baby is okay, they will think of the distance and say I will just go there and nothing will be done." (HFW₄)

"The doctors attitude of just shouting now and then that discourage a lot of people, because people are afraid that if I go to the hospital they will shout at me. As I am talking now some women are discouraged to seek help from the health facility, they are afraid of being shouted just because of how some health workers behave sometimes." (Woman₈)

"And also at the hospital, there should be material resources like medicine and the like. If these things are not in adequate supply, even if you send a person there, she will find there is no medication, or they are failing to treat her because there are no material resources to use; that means there is nothing good. So, this is both ways, workers are supposed to be cared for by being provided with enough material resources; then women will see that the care is adequate." (CHW₅, Health Surveillance Assistant)

"[The nurse] once insulted me when I came to give birth to my other elder child. Eih! (...) 'Come on get away!' 'You are stupid... Was I the one having sex with you?' Eeeh! She insulted me. This time again I was really worried thinking, I am going now, will I not be insulted again? Luckily, I was able to meet this gentleman [other HFW]...that one is better." (Woman₃)

As discussed earlier, women referred from the community may have complaints of poor quality of care and long waiting times at the HF, which in turn will have consequences on the trust given to CHWs but also to the MOMI project.

“A concern was raised by one of the postpartum woman who went to the facility for postpartum check-up when she was not feeling well. She is a member of a MOMI community group and reported that when she went for postpartum check-up she had expectation that the nurse would check her but the nurse just checked the baby and nothing was done to her. This made her feel bad. At the community meeting she asked a question if there will be an addition of a special HFW for MOMI activities to do the check-ups as it is not prioritised by the health worker who is currently working. She was directly quoted saying: “You MOMI people are encouraging us to go to the health centre for PPC now I want to know if I go there today am I going to find a new health worker who have been deployed to offer this PPC that you are teaching us about?” When the MOMI researcher followed up on this question they were told that the community is disappointed with the quality of services and the negative attitude of the health workers at the facility because all they do is check the umbilicus sometimes they do not even bother to check on the mother and baby during the postnatal check-up.”
(Field observations)

HFWs interviewed are aware of the fact that women will come to the HF based on their previous experiences or based on what they have heard about the HFWs and services provided. However, not much is done to try to address the situation.

“There are factors like the way they are being received, reception itself; if they are neglected or they feel not well accepted, they can say aaah, maybe I’ve just wasted my time. But if you receive them well, and they get what is supposed to be given to them, they will appreciate for the right service, yah.”
(HFW₃)

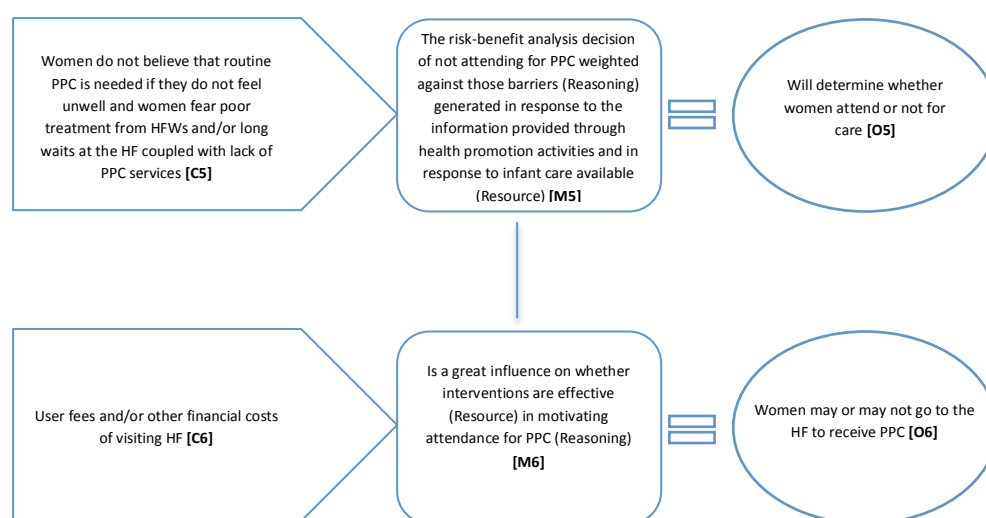
“The care that I can render can also have a big impact even to the community. Because if I take care of a woman at the hospital, then women from the communities will know the goodness of coming to the hospital. If the opposite happens, the community too will not hesitate to call us names.”
(HFW₅)

“Well, they are disappointed like when they come, they have to wait maybe for long hours, yah, and we know that this woman really wanted to be checked. And that’s why she has waited for this long; and you will find that, at the same time the nurse is attending to other women. Maybe the nurse is doing antenatal clinic, and there are women here who are waiting for the postpartum check. So, at the end you find that they have waited for long and they will tell us we came here very early.” (HFW₁₂)

Additionally, women face difficulties in meetings the transportation costs for attending the HF. In case 4 where women seem to receive more PPC services than in other HFs, women face more financial difficulties as the service level agreement with the government only runs up to 6 weeks postpartum. According to field observations, most women will take advantage of the PPC services up to 6 weeks but will choose not to go to the HF beyond 6 weeks.

“[Women] don’t have to pay but a baby or mother outside 42 days, which is six weeks, has to pay. Now because its free services within this period, they usually make sure that once they see anything strange on the baby or herself, they seek medical help. (...) Now from 6th week onwards its where there is that retardation because they know this baby if I bring this baby to the facility, I need to have money. Without money I will be assisted but I will be charged. (...) So it’s also a demotivating factor.” (HFW₇)

In conclusion, women do not believe that routine PPC is needed if they do not feel unwell and women fear poor treatment from HFWs and/or long waits at the HF coupled with lack of PPC services (Context 5). Therefore the risk-benefit analysis decision of not attending for PPC weighted against those barriers (Reasoning 5) generated in response to the information provided through health promotion activities and in response to infant care available (Resource 5) will determine whether women attend or not the HF for PPC (Outcome 5). Additionally, user fees and/or other financial costs of visiting the HF (Context 6) is a great influence on whether interventions are effective (Resource 6) in motivating attendance for PPC (Reasoning 6). Women may or may not go to the HF to receive PPC (Outcome 6).



5.7 Conclusions on implementation of MOMI in Malawi

Below, we summarise the findings of the MOMI implementation in Malawi and the factors that have an impact on MOMI's objectives: increasing the demand for and improving the provision of PPC.

Unlike other countries, MOMI in Malawi embedded implementation through a district team. However, this approach did not deliver the expected results of such collaboration as most of the project's timeframe was spent on planning than implementing. As a result, implementation duration was short and implementation strength was weak, which meant that most of the programme theories could not be tested in this setting. However, the evaluation yielded interesting findings in terms of barriers to implementation (see box).

Degree of MOMI implementation in Malawi:

- Unlike other countries, MOMI PACHI embedded implementation through a district team, however this approach did not deliver the expected results of such collaboration.
- The weak implementation strength could partly be explained by the over ambitious initial implementation plan, especially at the community level, and by important changes in management structures within the implementation team.
- Limited supervisions and trainings of HFWs and in particular CHWs by MOMI PACHI and the district MOMI team, created important gaps in implementation.
- Several elements of the implementation plan were not fully implemented (e.g. community groups) or not at all (e.g. Maternal and Neonatal Death Surveillance and Response).
- Limited impact of MOMI on PPC changes at the HF and even less in the community.
- Sparse implementation of interventions combined with delayed implementation meant that most of the programme theories could not be tested in this setting.

Factors influencing demand from women for PPC:

- Interrupted trainings of CHWs combined with a lack of supervision led to a sporadic implementation of MOMI community activities.
- Lack of resources and training to refer women from the community to the HF.
- Limited insight in MOMI community volunteers' motivation to conduct their activities besides the reported lack of incentives given to MOMI volunteers.
- Women were less likely to attend community meetings if village chiefs were not involved in the process.
- Women's motivations to attend the HF during the postpartum period revolved around infant care rather than maternal care.
- Experiences of women at the HF – such as waiting times, quality of postpartum care received, attitude of HFWs, costs of visiting the HF – influenced whether women came back to the HF for subsequent PPC visits.
- Demand for postpartum family planning depended on the husband's position on FP.

Factors influencing provision of PPC by HFWs:

- Lack of MOMI training and supervision resulted in a lack of PPC service delivery.
- HFWs were unmotivated to provide PPC due to high workload, low staff levels and in some cases remoteness of the HF.
- There was a lack of skilled HFWs to provide long lasting contraception methods.
- There are no monitoring or accountability mechanisms in place to avoid staff shortages when HFWs leave their clinical duties leading to gaps in implementation.
- Lack of material resources, of dedicated physical space for PPC, of service integration, of staff and high workload translated into barriers to PPC provision whereby women might not receive PPC or faced long waits.

Chapter 6 – Chiúta district, Tete Province, Mozambique

6.1 Interventions Implemented in Chiúta District

In Chiúta district, three interventions were chosen and implemented across 4 health facilities (HFs) and 25 communities:

- Intervention 1: Upgrade mother and newborn postpartum risk assessment and management at facility and community level through the use of checklists
- Intervention 2: Scale up access to and use of postpartum family planning through making immediate postpartum intrauterine device (IUD) available
- Intervention 3: Improve access to and use of maternal postpartum care and services by integrating maternal PPC in child clinics and outreach activities

Intervention 1 was directed at the HFWs, as well as at the CHWs and TBAs in the community. Checklists were developed to improve early detection, risk assessment, treatment and referral of postpartum complication cases in health facilities and communities. Checklists for CHWs were simplified and contained images to make the work of CHWs easier. All actors were trained on the use of checklists and a refresher training was provided in April 2015 (see Appendix 2). To assist them, MOMI ICRH-M conducted supervision visits and provided to the HFWs a toll free number to get in touch with the district MCH nurse in case of difficulties. CHWs, who receive an allowance from the government, did not receive any incentives from MOMI besides the per diems provided when attending trainings. TBAs, on the other hand, received non-financial incentives (traditional cloth, T-shirts and scarves) and were trained so they could facilitate the work of CHWs given their established status in the community.

Intervention 2 focused on training MCH nurses on PPFP including IUD insertion, with training also supported by supervision visits. The purpose of the intervention was to encourage IUD insertion immediately after delivery or at least offer one family planning method routinely in family planning consultations. Meanwhile CHWs, with the support of TBAs, were to sensitise women on family planning in the community.

Intervention 3 aimed to take a “one-stop shop approach” in service delivery: vaccination, family planning counselling, PPC consultations and growth monitoring were to take place at the same time, in the same space, reducing significantly the waiting time for

mothers at the HF and maximising opportunities for monitoring both mother and baby in the postpartum period. Service integration was included in the training received by HFWs and was incorporated in the supervision visits.

6.2 General Context of Implementation

Baseline studies conducted by the MOMI consortium gave an account of the implementation context in Chiúta and Mozambique that has been described in detail in previous work packages (WP 2, WP 3 and WP 4). The table below summarises the main findings.

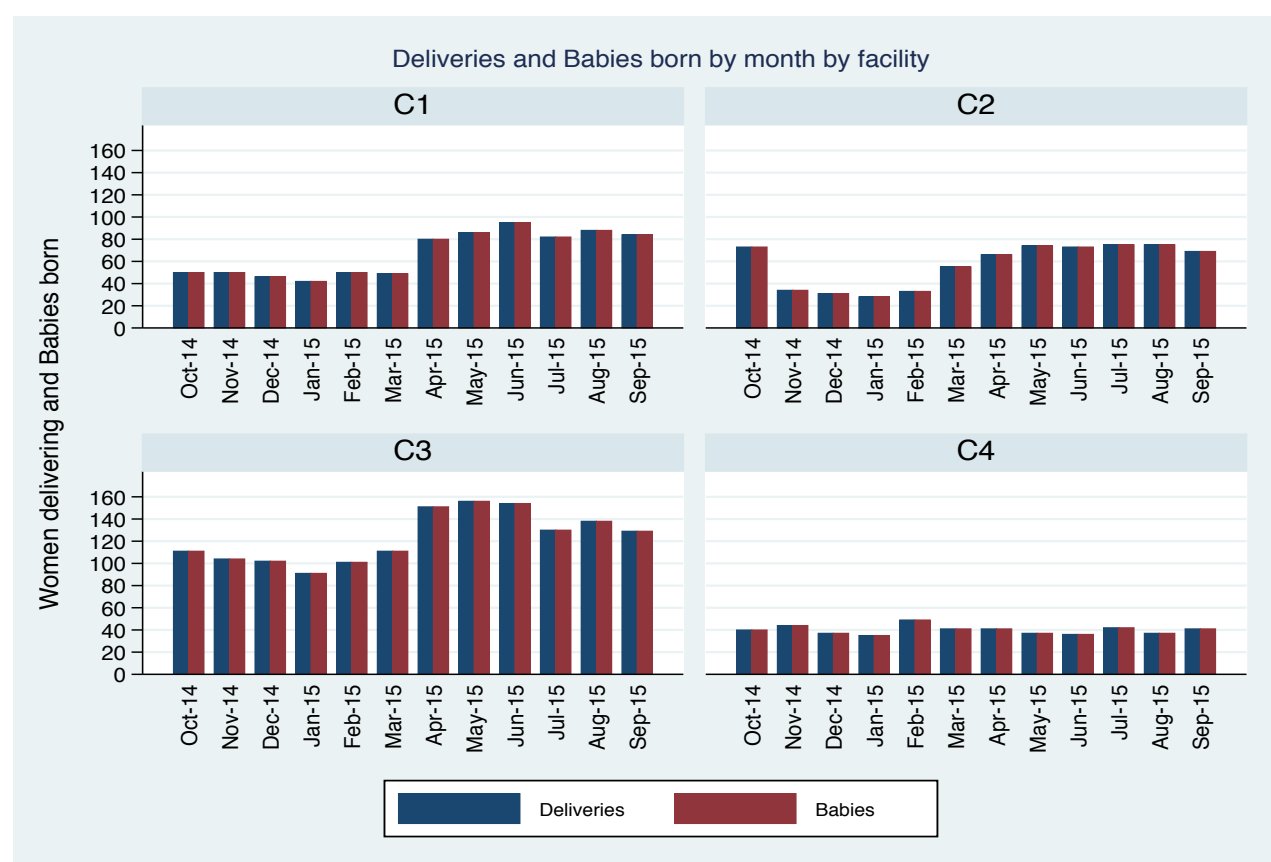
Table 9 – Contextual factors identified in baseline studies in Mozambique

Contextual Factors National/District level	<ul style="list-style-type: none"> - Poor referral system - 4 recommended PPC visits: within 24 hours of delivery, day 3, day 7 and between day 21-28 - Comprehensive national policies on postpartum care - Implementation of PPC policies are not a priority - Inadequate supportive supervision at district level especially for those HFs located in rural areas - Health information system: poor data collection and quality
Contextual Factors Health facility level	<ul style="list-style-type: none"> - Lack of essential equipment and commodities needed for basic emergency obstetric care and child care - Poor quality of service - Emphasis on child care but not on maternal care - Absence of PPC protocols - Low awareness and delivery of PPC by health providers - Lack of human resources - Lack of skilled HFWs - Low morale particularly among staff based in more remote areas
Contextual Factors Community level	<ul style="list-style-type: none"> - Geographic inaccessibility (distance to the HF, lack of infrastructure and transport) - Low levels of belief in the health system - High poverty rates and low education level - Low referral to health facilities from TBAs - Low knowledge on importance of HF-based deliveries, PPC and FP - Cultural beliefs and practices preventing women to leave the house for a week after delivery - High transport costs related to visiting a health facility - MCH care free of charge

Three of the HFs evaluated in the case studies are organised in a similar way. In those HFs, there is at least one general medical technician in charge of the outpatient sector (referred to as the screening sector), one nurse in charge of the MCH sector (including the maternity), one preventive medicine agent in the Expanded Programme on Immunisation (referred to as EPI sector) and one pharmacy technician and a lab technician. Those HFs – one in particular – are quite difficult to reach for a majority of the large population they serve. Complication cases needing referral are sent to the provincial hospital or to the fourth HF, which is organised in a similar way but with more resources and staff. All maternal and child services are provided every day in all HFs.

Figure 35 shows the number of deliveries and babies born by month for each of the four facilities in Chiúta district. C3 (facilities anonymised) has the most at around 100 to 150 per month, C1 and C2 each have around 40 to 80 deliveries per month and C4 has around 40 deliveries or less per month. All of the facilities except C4 showed an increase in deliveries starting around March or April 2015.

Figure 35 – Deliveries by month by facility, Chiúta district, Mozambique



6.3 Implementation Strength of interventions

The implementation strength of the interventions adopted in Mozambique is outlined in Figure 36 (see Appendix 2 for detailed intervention timeline). In general, there was a poor understanding of interventions (e.g. use of check-list, integration of services) at the start of the implementation. However this improved towards the beginning of 2015 when it was influenced mainly by greater engagement of MOMI implementation partner rather than being driven by local implementation teams. There is an assumption that use of the checklist would improve early detection and timely referral of postpartum complications. The conceptual pathway for this is not clarified in the project. Clarity on the concept of the 'one-stop shop' was also lacking. This altered the dose of the intervention. For instance, there were very minimal activities outlined for intervention 3 (service integration) while for intervention 2 in health facilities, only 6 out of the planned 28 on-job-training and supervision activities were conducted. For intervention 1, the use of checklist did not start until May 2014. Intervention activities were significantly delayed and most interventions, especially community interventions were not implemented for more than an 18-month period. Distributions of information, education and communication materials for PPC scheduled for the fourth quarter of 2013 were distributed in January 2015. Some of the planned intervention activities such as the innovative toll free phone for referral, ceased by the end of the project in 2015 after being operational for 6 months. This was due to a technical problem with the phone, and then the mobile phone company was unresponsive in resolving the issue.

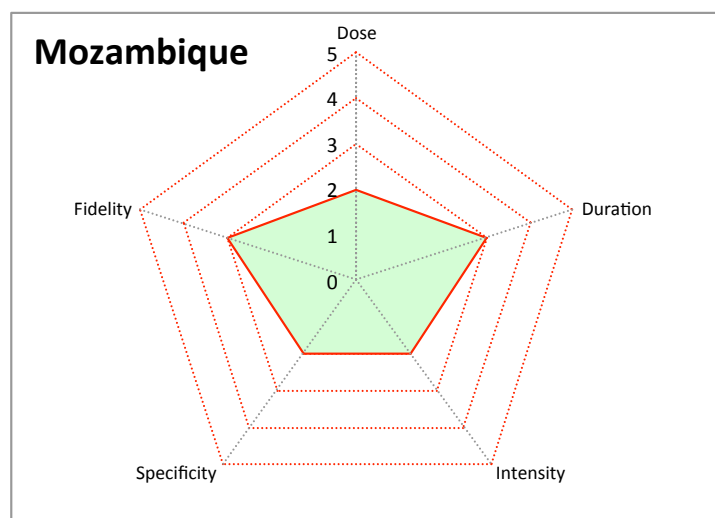


Figure 36 – Implementation strength in Chiúta, Mozambique

6.4 Work of the Community Health Workers

CHWs in Mozambique (in Portuguese APEs - Agentes Polivalentes Elementares) were an existing resource, trained and subsidised by the Ministry of Health. MOMI added postpartum care to their core activities that consisted of prevention and care of malaria, pneumonia and diarrhoea. All APEs interviewed received the MOMI training and had a positive outlook on what they learnt, as the training made most 'feel prepared' to conduct their MOMI activities. Many APEs mentioned that they would like to receive even more trainings in order to gain more knowledge on issues affecting their community.

"To ensure improvement in my work, I want more training, so that I know and am able to do a lot more for my community." (APE₁)

APEs also appreciated the supervisions organised by MOMI ICRH-M, however it does not seem from their testimonies that the supervisions were regular. Several APEs called for more supervision.

"You should come visit us often, at least every 2 to 3 months, you should come and talk to us, so that we become strong as we are." (APE₂)

"Our supervisors should give us strength, should provide oversight, refresher training and more training to continue our work." (APE₃)

"They should give us a lot of courage for the work we are doing, as APEs, so that we can have more strength." (APE₄)

APEs, who receive an allowance from the government, did not receive any financial or non-financial incentives from MOMI besides training and supervision, yet they are still motivated to do their job despite the difficulties encountered in their day-to-day activities (that we will describe later on). Their motivation seems to be driven by the need and will to help their own community and by watching the community follow their recommendations.

"What motivates me is that I want to teach others what I learnt at my work so that people can learn new things and can leave old things, so that they know women's health issues." (APE₁)

"I feel happy because when I tell them, they receive the information and I know that they are happy to be informed." (APE₂)

"Seeing that the work that we are doing is changing, since people are abiding by the information." (APE₅)

DESPISTE E MONITORIA DE RISCO E COMPLICAÇÕES PÓS-PARTO
GUIÃO PARA COMUNIDADE (CHECK LIST 1)

Data de nascimento da criança _____ Lugar do parto (US) _____ (fora da US) _____
Nome da USa _____ Código da mãe na Ficha ou caderneta _____
NOME DO APE/PT _____

ASPECTOS A OBSERVAR NA MÃE	Preencher: X=SIM			Risco ou Complicações a considerar
	1ª VPP	2ª VPP	3ª VPP	
				Hemorragia
				Convulsões
				Febre
				Dor de cabeça
				Corrimento com mau cheiro
				Mastite
				Depressão Pós-Parto

Checklist for the mother used by CHWs to identify postpartum complications during home visits

In addition to the community outreach events, APEs conducted home visits to postpartum women, using checklists to help them identify danger signs. APEs do not seem to have a specific schedule for the visits, as those interviewed put forward different time periods during which they visit women. However, all of them wait a few days after delivery to conduct their first visit, as it is difficult to gain access right after delivery for the APEs who are mainly male workers. The second visit takes place between 2 and 4 weeks after delivery and the last visit around the 6th week.

"They say that men should not go where women have delivered." (APE₄)

All APEs interviewed reported that the checklists are very easy to use and helpful.

"We, the APEs are very pleased that our checklist helps us identify the existing conditions in the community with the mother and the baby. Everything is easy." (APE₃)

"It is ok as it is and the pictures are very easy to understand." (APE₄)

"I am pleased to open checklists, because I learn a lot, and the people that I teach also understand me." (APE₁)

In case of complications, APEs refer women and infants to the HF by issuing them a referral note. Since APEs are respected in the community, their recommendations are usually followed, although some are still reticent to be referred to the HF.

"If a person delivers at home, people come to inform me or they call me, to tell me that someone gave birth at home and has some problems, and if I go

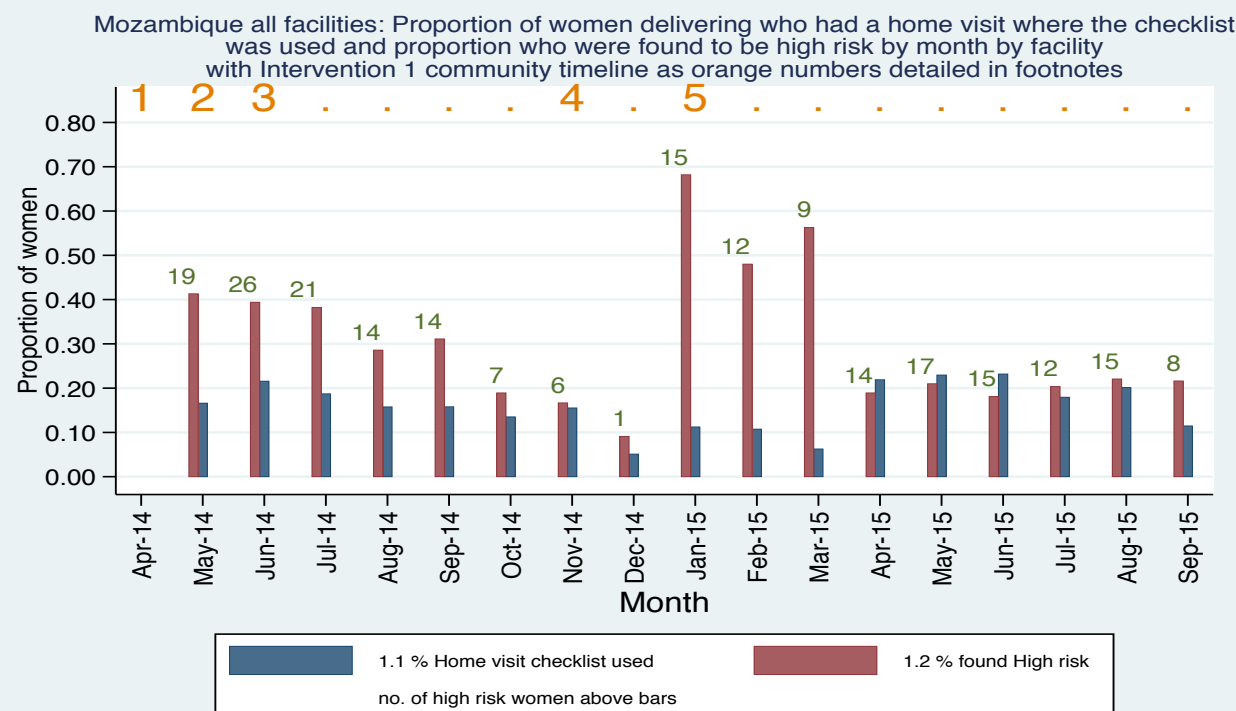
there and see that it is something complicated, they tell me to issue a transfer note. I refer to C3, if they do not have a bicycle, I give out my bicycle to her husband to be able to go to the hospital.” (APE₁)

“Sometimes there are other people that take time to understand, these things are complicated, they are dangerous. Sometimes they think otherwise, they think of local traditions. And with our techniques, we [APE and TBA] have to convince the family to come here.” (APE₆)

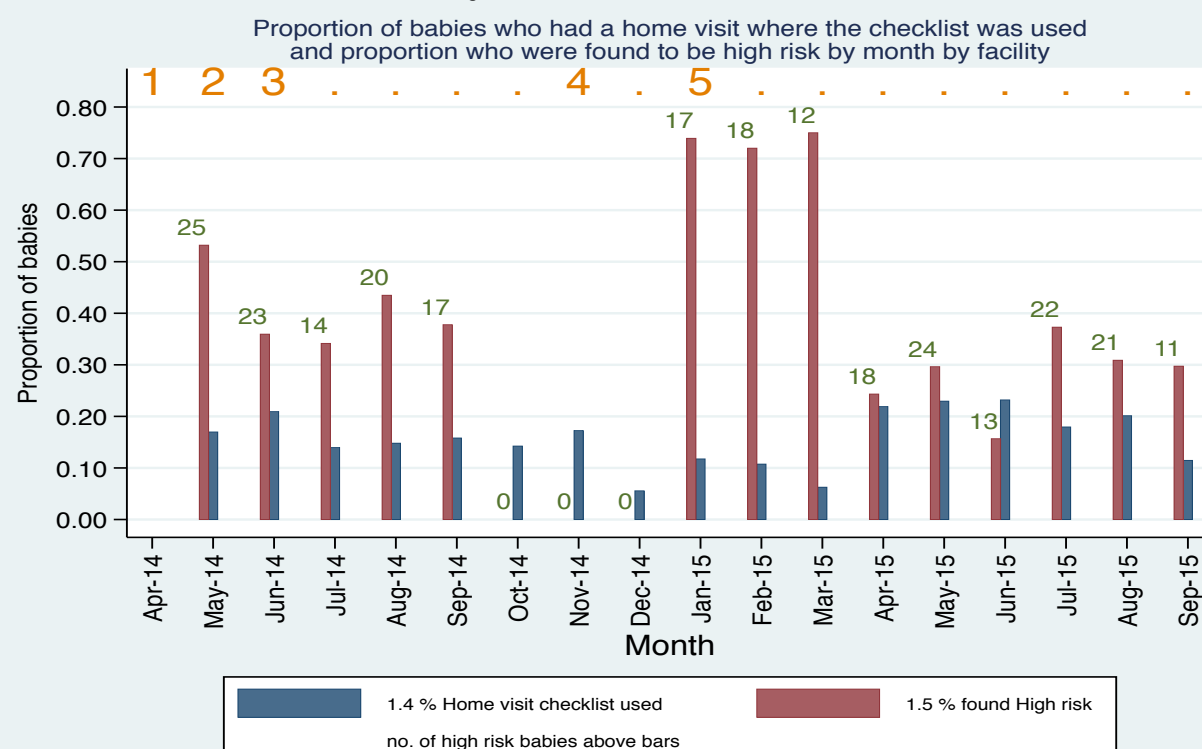
“I inform the patient, along with the family that we have to do this and that. Being alone in this community makes it hard, when I say it is an emergency, most understand but some do not and there is nothing I can do.” (APE₄)

Figure 37 shows the proportions and numbers of women and babies who had a home visit where the checklist was used and the proportions and numbers who were found to be high risk following the use of the checklist. Checklist use started in May 2014 at around 20% of women who had a home visit and fell to around 5% by December 2014, suggesting a limited initial impact of MOMI intervention 1 community activities indicated as a timeline at the top of the graph and detailed below the graph (checklist 1 for 0-6 weeks was started in April 2014). The proportion (blue bars) did pick up back to around 20% by April-June 2015 but then declined to around 10% in September 2015. The percentage of those who were checked that were found to be high-risk also initially declined, before spiking in January to March 2015 at around 50-70% and then declining again. Of note is that training and use of checklist 2, for 2-9 months started in January 2015 – it’s possible that this was related to the spike in the numbers found to be high risk (though data are not disaggregated by checklists 1 and 2). The proportion of babies checked with the checklist and found to be high risk (lower panel of figure 37) followed similar trends to the mothers (upper panel). Figures A7.14 and A7.15 in Appendix 7 show home visit checklist use for mothers and babies by facility.

Figure 37 - Home visit checklist use by month by facility, Chiúta district, Mozambique



- 1 = 21-30 Apr 2014: Training of 47 CHWs (APEs and TBAs) on detection and management of PP risk and PP danger signs among mother and newborn using a checklist and distribution of checklists immediately after training;
 Apr 2014: Establishment of communication system for referral between Community (CHWs and TBAs) and health centres. CHWs and TBAs can use toll free line to call the healthcentre to refer a patient, seek transport (ambulance) and ask oral assistance/information at facility health workers regarding a client
 2 = May 2014: Start implementation PPC MOMI intervention at community level
 3 = 9-23 Jun 2014: Supportive supervision conducted by Dr Foia (district health officer and MOMI responsible of MOMI implementation at district level) and nurse Berta. All CHWs were visited. The objective was to see how checklists are completed
 4 = 17-27 Nov 2014: Supportive supervision conducted by Dr Foia (district health officer and MOMI responsible of MOMI implementation at district level) and nurse Berta. All CHWs were visited. The objective was to see how checklists are completed and how the CHWs coordinate these activities with the nurses of the peripheral health facilities (referral, delivery of the completed check list)
 5 = 28-31 Jan 2015: Training of 44 CHW (APEs and TBAs) on the use of the check list 2, as well as refresher training on the use of check list 1 and its challenges



APEs deplored the lack of feedback from the HF on the outcome of their referral. They have to try to get the information from the people they referred or call the HF, using their own money to purchase phone minutes, in order to enquire about the referred patient.

Not all women interviewed received a home visits but they know of APEs because of their talks in the community. APEs are trusted by their community who chose them to be APEs a few years before MOMI started and are seen as a source of knowledge.

“We become very happy because he comes teach something good (...): Because what the APEs say is what happens in the hospital. But what they say in the community is not true.” (Woman 1)



APE using the MOMI checklist during his visit to a postpartum woman –
March 2015

“They teach us many things.” (Woman 2)

More than being a source of knowledge, APEs are perceived as first aiders in their community. Communities where MOMI worked are very remote and access to the health facility very difficult, APEs can facilitate transfers as well as provide basic medication and rapid tests for the other aspects of their health activities. In very remote communities, APEs are the only connection to the HF.

“The role of the APEs in the community is very important because they save lives, I give first aid since communities are far from hospitals and there is no transport. (...) My relationship with the community is good because I am the son of the area and they already know and are used to me since I save many lives.” (APE₃)

“[The community] see them as people that save our lives when we get sick and at night when we do not have transport to go to the hospital, they help us.” (Woman₂)

“Very happy, because he saves lives, and the hospital is far away. They help us a lot, they reduce deaths of mothers and children.” (Woman₃)

“Even the mothers referred to him as ‘doctor’, he is considered as a first rescuer.” (Field observations)

“Community workers are the key, on our own we cannot do everything, we cannot manage to do it even if we have good policies, even if we have good plans, even if we have knowledge, we cannot do everything. First and foremost, the communities have their habits, they have their cultures and community workers are accepted in the community, we are hardly known at the community level, that is why we have to work with them because they are known within the community.” (Policymaker₂)

The APEs relationship with the HFWs is also very good and many HFWs described that they are doing a great and necessary job in the community. Field researchers observed the constant presence of MOMI-trained APEs and TBAs in the three small HFs, who came to provide support to the HFWs, bring some information, accompany mothers for delivery or postpartum check-ups. However, the field researchers did not notice any APEs or TBAs around the larger HF.

“APEs have an important role in the community, if the mother has problems, it is them that are the first point of call. They act as a liaison between the community and health facility.” (HFW₁, EPI sector)

“They serve as a link between us, the health sector and the community. For us to know what is happening in the communities depends on APEs.” (HFW₂, EPI sector)

MOMI-trained TBAs are used as a resource for APEs to facilitate home visits. TBAs were reported to be trusted and influential in the community since they assist women in home deliveries and life counselling. MOMI researchers interviewed often referred to the cooperation between APEs and TBAs as one of the major achievements of the MOMI project. However, not all APEs have a MOMI-trained TBA in their vicinity and therefore have to conduct home visits alone.

“For the first time, the APEs had a big challenge, we know that in African culture, there are some expressions that should not be asked by a man, for example, in checklist 1, there are some issues that the APE must ask if the mother is losing blood, if the mother is discharging those liquid. So during home visits, the APEs had difficulties in asking these questions because in the villages, these issues deserve serious consideration and great respect, but over time, since there are some birth attendants in the villages, so they were making joint consultation on those issues that are deemed confidential, they ended up being asked by [TBAs] and with time, the community began to see that an APE is

important figure, that he is not there only to understand these issues but is mainly worried with the health of the community.” (Policymaker₆)

While APEs are widely accepted by HFWs, opinions on TBAs are mixed. In some HFs, TBAs are not trusted while in others they are seen as a great resource to the point that in one HF, TBAs are conducting deliveries when the MCH nurse is unavailable or absent.

“[Delivery] was done by traditional birth attendants in the delivery room because the [MCH] nurse was absent. TBAs assisted delivery using a pair of scissors, clamps and a thread; they cut the umbilical cord, withdrew the placenta and laid the mother on the bed. They wrapped the baby in blankets and handed him to the mother. The baby was not weighed at birth because the TBAs did not know how to make the reading. The mother was resting with the baby and the TBAs washed the material and put them to dry in the sun to sterilise and have them in birth kits (pots that contained surgical instruments) in wood. When finished, they cleaned up the place, and informed the nurse that the delivery was made. TBAs did not fill in any log book and when finished, they informed the nurse to go to the delivery room for weighing.”
(Field observations)



MOMI-trained TBAs after their refresher training, wearing the clothes given by MOMI as incentives – April 2015



APEs working in Chiúta district after their MOMI training – April 2015

HFWs and APEs interviewed asserted that the MOMI community intervention increased attendance to the HF for deliveries – a trend confirmed by Figure 35 – and postpartum care and women’s health-seeking behaviours have started to evolve away from traditional medicine.

“Now, women are able to give birth at the hospital and when they give birth at home they quickly go to the hospital for PPC. They now know how to prevent diseases and are able to make enriched porridge for their babies to prevent malnutrition. There are no longer maternal deaths in the community nor postpartum bleeding.” (APE₃)

“What has changed is that when children are born, they go to the health centre to receive vaccines and when they are sick, they ask for a transfer to the health centre for treatment, there is a reduction in traditional treatment.” (APE₄)

“I think that [the APEs] have an influence in the community, it is having a good impact. Mothers might be scared that they may not be well received here [at the HF] and they give them a note that she carries and she feels motivated.” (HFW₃, MCH sector)

However, this impact is to be looked at in the context of the many barriers faced by APEs in their daily activities creating gaps in implementation by limiting the number of women (and communities) they can visit. The main barrier, mentioned by APEs as well as HFWs and women, is the small number of APEs in place in the communities. Not only there are few of them, but they also have to cover a great number of remote communities (in some cases communities of thousands of people) scattered over huge distances. For example, one APE interviewed serves 5 communities, 1 of them is a 5-hour cycle away. Another APE interviewed serves 9 communities, with the most distant communities being 4 hours away by car. Furthermore, people are also scattered within the same community, hindering the work of APEs during home visits.

“It is difficult because people in the community are scattered here and there and sometimes it is 5 to 10 kilometres, sometimes walking for two to three hours one already gets exhausted and calls it off.” (APE₅)

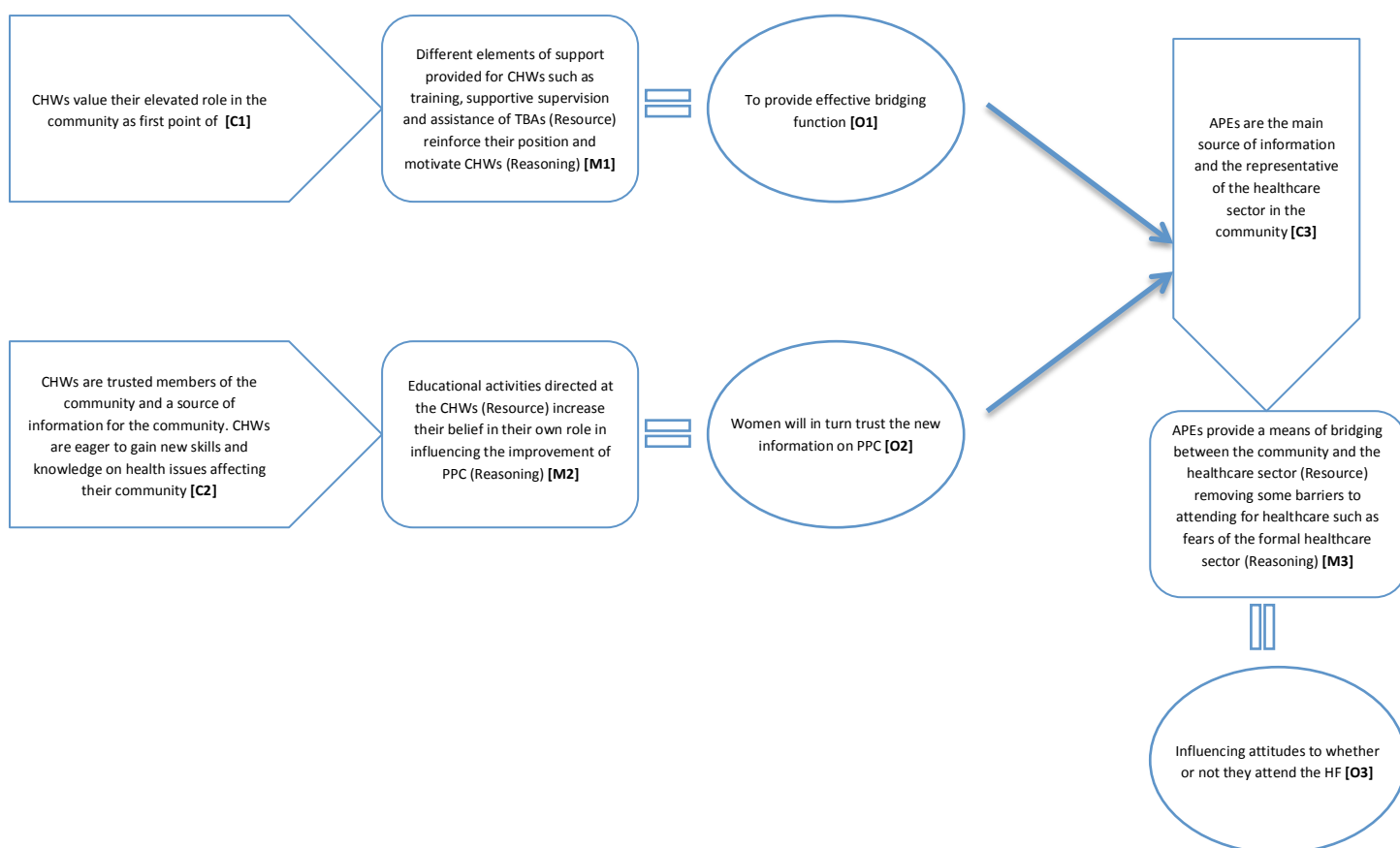
“No, 25 APEs do not even reach half of the District itself, but before we had 32 APEs. But due to policy issues at the ministry, we ended up reducing the number to 25.” (Policymaker₆)

Furthermore, most APEs interviewed explained that the bicycles provided by the government have broken down, and as they have little or no money to fix them, they

actually ended up doing their work on foot. APEs also reported long delays in their allowance payments (sometimes over 6 months) from the government and the need to be provided with raincoats, boots and more health kits to improve their work conditions. It is to be noted however that despite the lack of material and financial resources, the APEs keep on doing their work the best they can, using their own money when they can afford it.

APEs mentioned another factor that might hinder or facilitate their work: the cooperation of the community leaders. Their cooperation is crucial, as APEs need their approval before conducting community awareness events. While some APEs reported they had the support of the leaders, others do not and thus cannot gather the community for health talks. This outlines the importance of involving the leaders in the implementation process, which was not done here.

To conclude, APEs value their elevated role in the community as first point of aid (Context 1). Different elements of support such as training, supervision and assistance of TBAs (Resource 1) reinforce their position and motivate APEs (Reasoning 1) to provide effective bridging function (Outcome 1). In addition, APEs are trusted members of the community and a source of information for the community. APEs are eager to gain new skills and knowledge on health issues affecting their community (Context 2). Therefore educational activities directed at the APEs (Resource 2) increase their belief in their own role in influencing the improvement of PPC (Reasoning 2) and women will in turn trust the new information on PPC (Outcome 2). Finally, because APEs are the main source of information and the representative of the healthcare sector in the community (Context 3), they provide a means of bridging between the community and the healthcare sector (Resource 3) removing some barriers to attending for healthcare such as fears of the formal healthcare sector (Reasoning 3), influencing attitudes to whether or not they attend the HF (Outcome 3).



6.5 Women's Demand for Postpartum Care

The majority of women attending all four HFs face important barriers to reach the HFs. Indeed, communities served by the HFs are remote and lack infrastructure connecting them to the HFs. Some communities are located way over 60 kilometres, meaning that women (and APEs) have to travel over 4 hours by car to reach the HF. Additionally, there is little access to transportation and most women have to walk to the HF, sometimes starting their journey at dawn to make it to the HF at a reasonable time. When transportation is available, it comes at a price, and many cannot afford the financial costs. A few respondents explained that they would have to sell some of their livestock to afford the costs.

A majority of women are not willing to face those barriers to receive PPC and even for delivery. We have identified several factors, based on the observations and interviews, to explain the demotivation of women to attend the HF. Firstly, several women and APEs

commented on the negative attitude of HFWs leading to the reasoning that it is better to deliver at home.

"Some [women] say delivery at home is better than at the hospital. (...) Because they may be ill-treated." (APE₅)

Moreover, in at least 2 cases, women who come to the HF after delivering at home to receive the baby's vaccination are sanctioned by the HFWs because they did not come to deliver at the HF. They are told they have to sweep the HF before being able to receive the vaccinations and the baby's vaccination card in order to set them out as a bad example not to be followed.

"The distance that we take from home to the hospital is too long, we stay many hours waiting for transport at the bus stop and when we get here, they tell us to sweep or do weeding, that makes it a little difficult for us who live far away." (Woman₄)

"The nurse (...) knew that the mother delivered outside the health centre, and he asked why she had not delivered the baby at the hospital. She explained that her house was far from the hospital, but the [screening] nurse affirmed that he would not give the child's vaccination card if the mother did not do the cleaning of the centre. She agreed to sweep the health centre, and she was told that she was going to find cleaning materials in the laboratory. The mother with her baby in her arms went to the service agent that was in the laboratory and she was given the broom to sweep the courtyard of the health centre. The mother asked another mother that was in the corridor of the health centre to stay with her baby so that she could sweep the courtyard of the centre, the other mother received the baby and the woman swept the courtyard alone, however, we noted that she was angry. When she finished, she gave the broom to the laboratory agent, angry, and she returned to the MCH room. The nurse came out of his office to confirm that she had swept the courtyard and later he gave the woman the immunization card and administered polio vaccine to the baby and vitamin A for the mother." (Field observations)

"The EPI technician also has such practices. Another mother came alone to the health centre about 2 weeks after delivery (in the community) for vaccination. The technician told the mother to sweep the courtyard of the health centre. The mother made a frown and angry face and told the technician she had no one to leave her baby with, and could not sweep unless the technician stayed with her baby. The two were arguing for about 5 min. The EPI technician angrily went to the lab agent muttering that women did not come to deliver at the hospital, and only came weeks later for consultation, as such, they had to be given a lesson as a way to educate them,

so that they should pass the message to all mothers not to deliver at home. And if they did deliver at home they should immediately go to the health centre, otherwise when they come late to the health centre they should sweep the courtyard in order to have their child's vaccination card.” (Field observations)

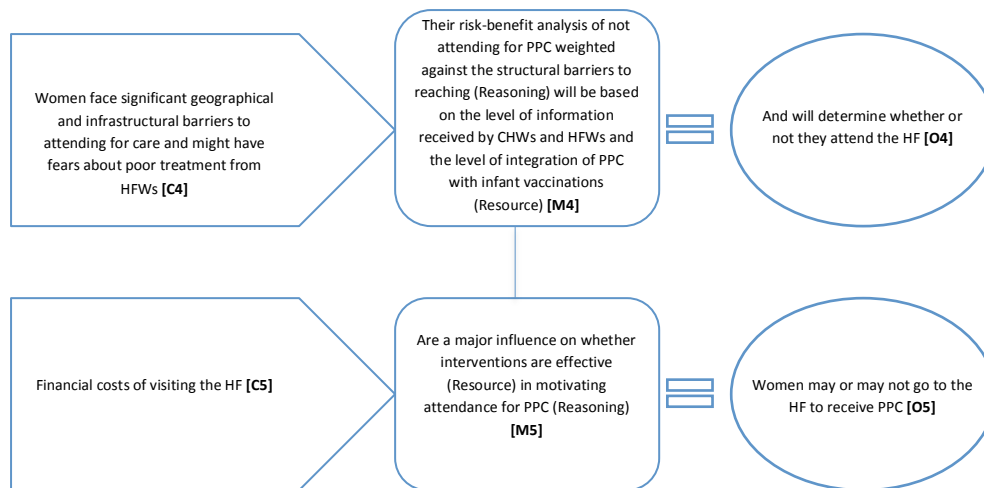
Therefore the poor attitude of the HFWs will have an impact on attendance for PPC if women are scared of HFWs being angry at them for delivering at home.

Secondly, it is clear from all participants that women (and their families) rely heavily on traditional medicine since it is readily available compared to the HFs that are very difficult to reach. Given that there are not many APEs in the community and they face difficulties to cover their area, the message on the importance of PPC does not reach the majority of women. Furthermore, women attending the HF in particular for infants' vaccination are not told by healthcare workers about the importance of PPC and the existence of a postpartum visits schedule. Several women observed and interviewed came for growth monitoring and vaccination, received the service but were not told by the HFWs what type of vaccine the baby received, when the PPC consult take place (even when it was supposed to be the same day) and when they are meant to come back to the HF for maternal and infant services.

“I have never heard that one must go back [after delivery] and that there are these consultations.” (Woman₁)

Due to their lack of knowledge around PPC, it is difficult to get an insight on women's motivation to overcome barriers to receive care. However, women massively attend the HFs for infant vaccinations, even when they deliver at home. Therefore, there is a missed opportunity to inform women about PPC when they attend the HF for vaccination.

In conclusion, women face significant geographical and infrastructural barriers to attending for care and might have fears about poor treatment from HFWs (Context 4). Their risk-benefit analysis of not attending for PPC weighted against the structural barriers to reaching to the HF (Reasoning 4) will be based on the level of information received by APEs and HFWs and the level of integration of PPC with infant vaccinations (Resource 4) and will determine whether or not they attend the HF (Outcome 4). Additionally, financial costs of visiting the HF (Context 5) are a major influence on whether interventions are effective (Resource 5) in motivating attendance for PPC (Reasoning 5). Thus, Women may or may not go to the HF to receive PPC (Outcome 5).



6.6 In the health facility

It proved quite difficult to get the HFWs to trust the MOMI field researchers for fear that their supervisors might know what they have said, even when assured data confidentiality. As a result a couple of HFWs refused to have their interview recorded and most of the interviewees provided brief answers to the questions asked. However, observations and informal conversations with HFWs were rich in information.

6.6.1 Provision of Postpartum Care & Motivations of HFWs

A. Use of checklists for provision of PPC

To improve the delivery of PPC at the HF (Intervention 1), HFWs were trained and provided with checklist 1 in May 2014 and checklist 2 in January 2015, covering danger signs and PPC for mother and baby (up to 1 year old). HFWs interviewed who were trained mentioned that the checklists are easy to fill out and observations showed that filling out a checklist during the consultation takes less than 5 minutes. However not all HFWs involved in maternal and child care fill out the checklists and their use is quite disparate and inconsistent across the HFs. For example, in one case, the HFW conducting paediatric consultations in the screening department fills out the checklists (with an emphasis on the baby) while the MCH nurse does not. In another case, checklists are opened only when something seems to be wrong with the baby, which could impact on the “proportion found to be high risk” in the quantitative indicators (see Figure 39). In one of the small HF, it was observed that both MCH and EPI HFWs are routinely filling out checklists for both mothers

and infants. Generally speaking, it seems that there is a better integrated use of checklists in smaller HFs. Furthermore, checklists are not filled out in the EPI sector (with the exception of one HF) – the sector that is the main point of entry at the HF for women since it is where infants are vaccinated – mainly due to lack of training and barriers to service integration. Another trend across all HFs is the lack of clinical assessment, especially of the mothers. Therefore the consultation is limited to questions asked to the mother.

“To do a complete postpartum consultation, you have to undress the mother, make general physical examination, undress the newborn and do general physical examination. It becomes a little difficult, and we only limit ourselves asking the mother, if the baby is fine, if the mother is fine. And it ends there but a mother can have an abnormality within that she cannot say because of people around and sometimes it is difficult to follow these standards [introduced by MOMI].” (HFW 4, MCH sector)

From the interviews and observations several factors were identified that hinder the use of checklists and provision of PPC. Firstly, in two small HFs, it was observed that the prolonged absence of the MCH nurse led to a lack of PPC provision (and more generally a lack of maternal services), longer waiting times for women and additional strain on the remaining

DESPISTE E MONITORIA DE RISCO E COMPLICAÇÕES PÓS-PARTO
GUIÃO PARA UNIDADE SANITÁRIA (CHECK LIST 1)

Nome da mãe _____ NID/Mês/Ano _____ Data de parto ____/____/____ Lugar do parto (US) _____
 (Fora da US) _____ Nome da US _____
 Nado vivo _____ nado morto _____ Morada (bairro ou localidade) _____

ASPECTOS A AVALIAR/OBSERVAR NA MÃE		Preencher: ✓=SIM			Risco ou Complicações a considerar
		1ª CPP Data: ____/____/____	2ª CPP Data: ____/____/____	3ª CPP Data: ____/____/____	
EXAME CLÍNICO GERAL	Rejeita o bebé				Depressão Pós-Parto
	Chora sem nenhum motivo aparente				
	Aparência triste				
	Não tem apetite				
	Não quer comunicar				
	Palmas das mãos descoradas				Anemia
	Conjuntiva descorada				
	Língua e gengivas descoradas				
	Respiração rápida com queixa de cansaço				
	TA superior a 140/90mmHG escreva o valor				Pre-Eclâmpsia imediato ao Parto
	Dor de cabeça forte (cefaleia)				
	Queixa de visão distorcida /turva				
Dor no estômago (epigástrica)					
EXAME FÍSICO E GINECOLÓGICO	Dor no baixo ventre (com ou sem apalpação e presença de massas anexais)				Sepsis
	Vulva ou períneo infectado (inchado/avermelhado ou com presença de pus)				
	Corrimento vaginal com mau cheiro				
	Febre/Temperatura >38°C escreva o valor				
	Fraqueza				
	Arrepios de frio/pele fria				Hemorragia Pós-Parto
	Sangramento vaginal abundante				
	Útero não contraído				
	Episiotomia ou lacerações/lesões vaginais com sangramento				
	Abcesso/nódulo na mama				
	Mamas ingurgitadas				
	Fissuras no mamilo com sinal de infeção				
	Febre/Temperatura >38°C escreva o valor				
	Outras sinais				
	OUTRAS CONDIÇÕES DE RISCO DURANTE PÓS PARTO	Faz uso de método de PF (DIU, implante, Depoprovera, Pilulas, preservativo)			
Sero estado de HIV não conhecido					
Sero estado HIV positivo sem tratamento					
Parceiro HIV positivo OU desconhecido					
Não recebe/toma sal ferroso e ácido fólico					

Page 1 of the HFWs checklist 1, covering the period from delivery to Week 6

HFWs working in other sectors. Secondly, due to local culture whereby women cannot show that they are in pain, HFWs who only focus on questions and answers rather than physical examination are more likely to misdiagnose postpartum women and not provide appropriate care.

“We noticed that women even if they were in great pain, did not express their feelings, neither through crying nor manifesting the pain (by screaming or facial expression, or through facial expression that depicts pain or sadness, and often maintained their bodies upright). They presented themselves normally and often only during consultation when they spoke and when they were observed is when we saw that were in great pain. (...) However, we noted that at the level of the health centre, this could be mistaken as if the mother was not suffering and that it is not a serious condition because often health professionals in [the HF], for example in the case of a mother who had retained placenta, said the mother was well, that she was not in great pain and that she was even eating.” (Field observations)

Thirdly, several HFWs are not inclined to open checklists for women that did not deliver at the HF. It is unclear however why HFWs are reluctant but it means that women who deliver at home (a high proportion) are less likely to receive PPC.

“When [women who delivered at home] arrive here, we open the form, we give them vaccine, but in normal conditions we are supposed to send them for postpartum consultation, but with difficulties. I used to do that, but often colleagues from other sectors could not receive them, saying that since you delivered at home, we will just open a form and give you vaccine and sometimes tablets.” (HFW₂, EPI sector)

B. Referral culture

Another aim of intervention 1 was to improve – through training, supervision and the use of checklist – the capability of HFWs to recognise postpartum emergencies and severe complications and refer them to the appropriate HF or hospital. Regrettably, the culture around referrals is very negative whereby HFWs are reluctant to refer patients with complications – even when the complication is correctly diagnosed – for fear it will be perceived at a higher level of leadership as a sign that the HF is incapable. The HFWs would not comment on record about the referral process and would give the standard answer expected from them.

“In the event of any complications that is above our capabilities, we refer to the district which is our reference centre, which has intermediate level technicians, MCH nurses with more capacity than us. So we refer to C3 and

when we see that C3 cannot handle, we transfer to the provincial hospital, we communicate that we have a patient in this state and they inform us to send to the city, they bring an ambulance.” (HFW₅, Screening sector)

However, their statements are in complete contradiction with the observations conducted in all HFs, informal conversations with HFWs and the monitoring indicators. HFWs are not empowered to transfer and to admit their lack of capabilities and fear how this would reflect at the district level on their HFs. Therefore, it was observed that the HFWs were lethargic in emergencies situation, delayed organising transfer or simply did not transfer all together leading sometimes to preventable deaths, to the point that the researchers conducting the observations had to intervene or were asked by APEs or HFWs to step in. We provide here several events observed across several HFs that illustrate the lack of action during referrals.

“The baby was born with respiratory problems, but was not transferred immediately, and the ambulance was still present at the health centre one hour before the [baby died]. The technician did not transfer the baby to Manje health centre.” (Field observations)

“Regarding the baby complication in the postpartum period, there was negligence in terms of probing deeper with the exams because the baby showed clear signs of severe disease (tremor, cyanosis, fever and prostration). Another fact was that the baby had been born in this health centre and had had seizures shortly after being born, but was discharged the next day. When the baby came with his mother, we saw that they did not consult the delivery book nor the checklist.” (Field observations)

“Another interesting factor is the meaning given to emergency and emergency transport at this health centre, and generally we observed this in the other health centres where we were doing observation. Serious cases are not treated as if they were urgent, and they keep on delaying transport for the patients to the referral hospital, and patients arrive at the hospital in critical condition.” (Field observations)

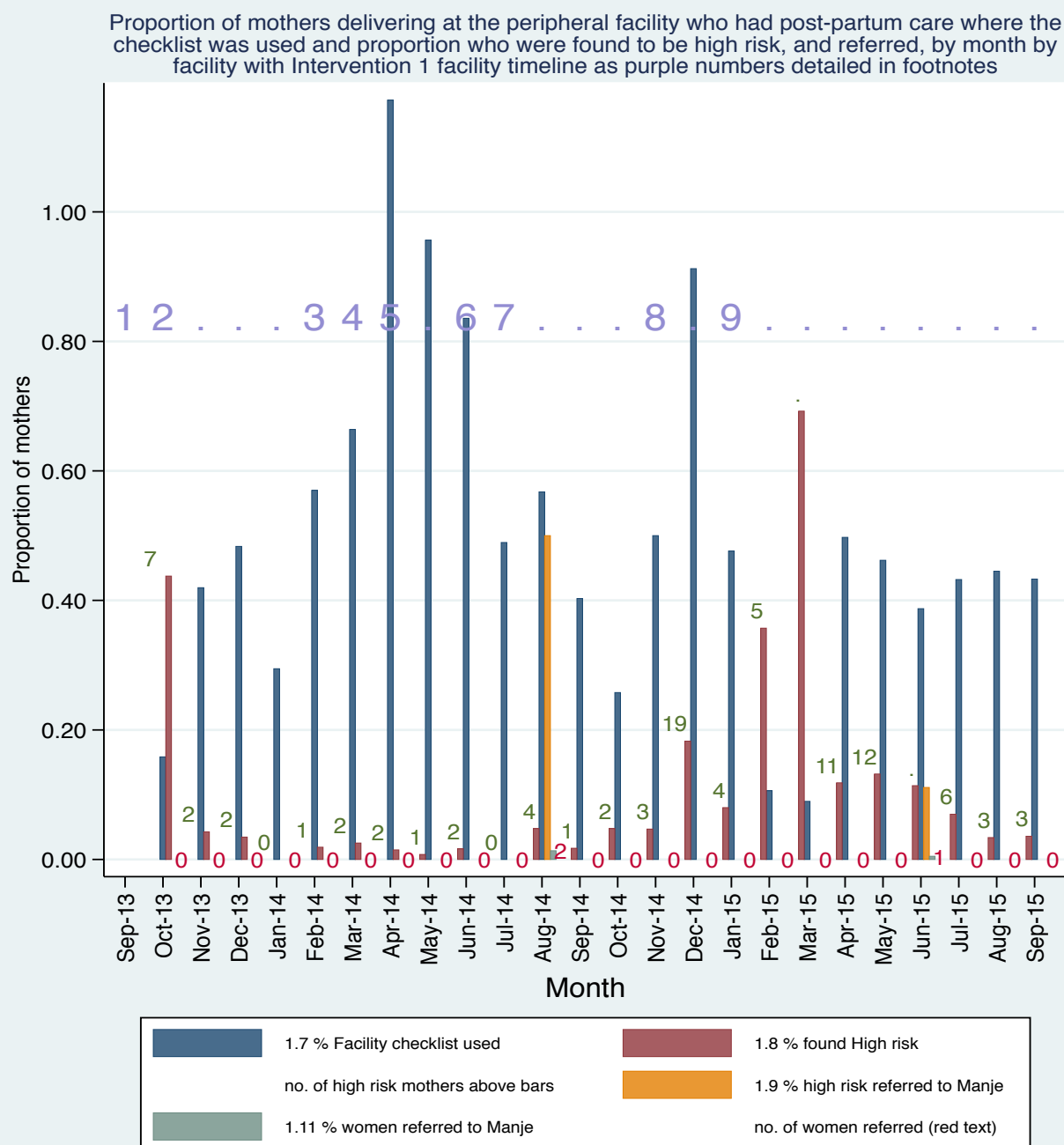
“We noted the arrival of a mother with a baby who was accompanied by the multi-purpose community health agent - APE, the baby was born in the community and did not cry. The baby was taken to the Health Centre, where a general medical practitioner observed the baby. The medical officer made some notes in his book of observations and opened the baby's checklist, he observed and asked to wait. After some time when the APE realized that the baby was still not crying, he approached the team and asked that together we intervene so that the baby could be transferred. [The researcher with a nursing background] gave assistance and spoke to the general medical officer

explaining the need for immediate transfer and he prepared the transfer to C3.” (Field observations)

“I think it’s a case of not wanting to be seen as not doing your job. They’re worried that [referring] will be interpreted as a sign of maybe being incapable.” (MOMI Researcher₃)

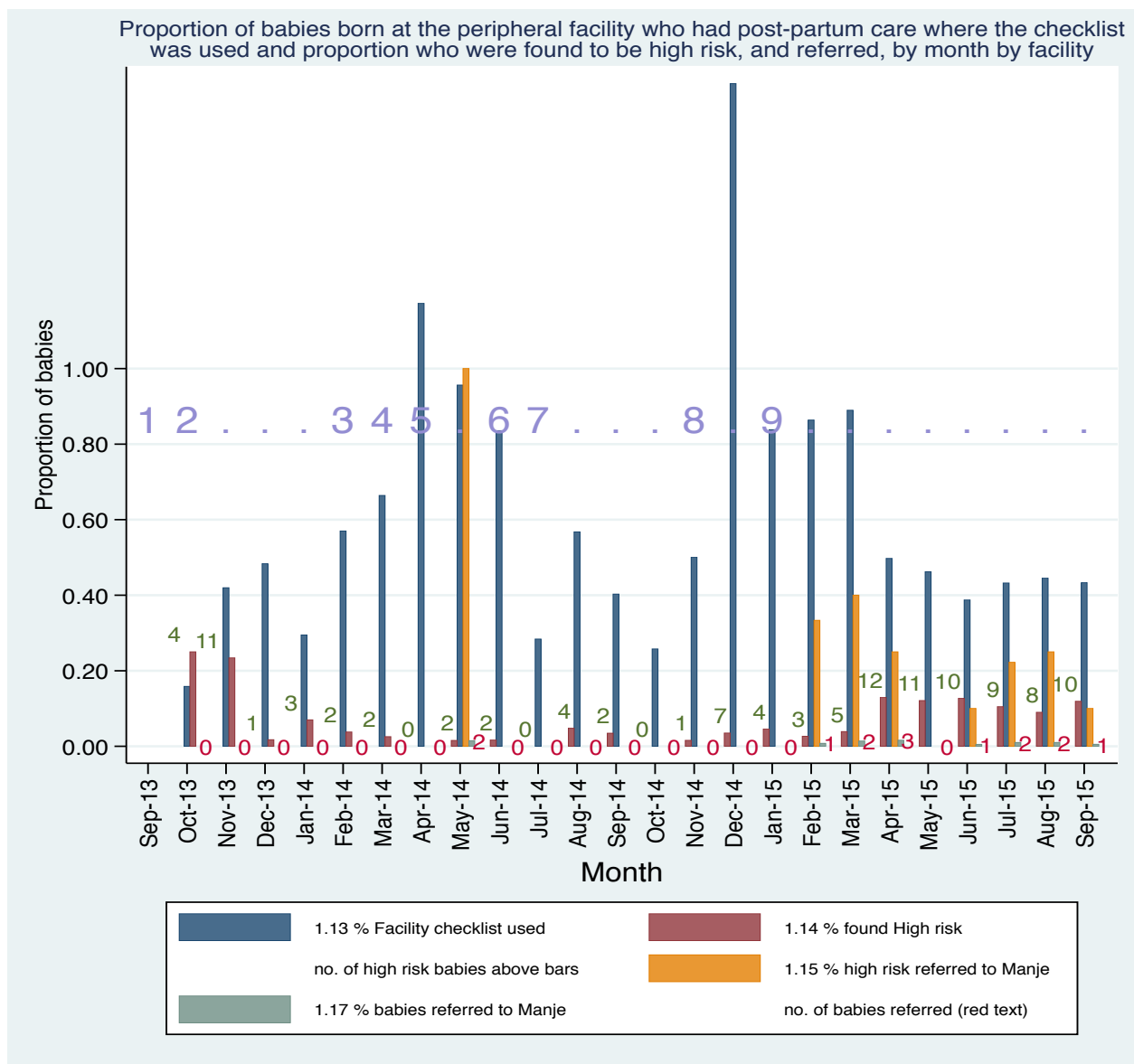
This inaction is backed-up by the monitoring indicators. Figures 38 and 39 show that very few mothers and babies were referred from the other facilities to Manje (the main facility); see red numbers at bottom of yellow bars – only three women were indicated to have been referred: two in August 2014, and one in June 2015, and only a few more babies were indicated to have been referred. These numbers are likely to be lower than the reality of referral though as field observations indicated that there were more referrals but that HFW were not reporting them. This assumption was later confirmed during the Participatory Evaluation Workshop. Figures 38 and 39 also show the proportion of mothers and babies at the peripheral three facilities who had postpartum care where the checklist was used (blue bars) – this was similar for both mothers (Figure 38) and babies (Figure 39) and increased from less than 20% in October 2013 to a peak of over 100% in April 2014, before going down again and then reaching another peak in December 2014 before again going down again. This pattern suggests no association with the MOMI intervention 1 activities in the facility indicated on the timeline in the figure. The proportion of mothers and babies that were found to be high risk following use of the checklists are given as red bars in Figures 38 and 39. In most months typically less than 10% are found to be high risk, but in some months much higher proportions of mothers were found to be high risk. For example in October 2013, over 40% of mothers were found to be high risk and in February and March 2015 high proportions of women were again found to be high risk. These latter peaks could potentially be related to supportive supervision and training in January 2015. Figures A7.15 and A7.16 in Appendix 7 show facility checklist use and referral for mothers and babies by facility.

Figure 38 – Facility checklist use and referral for mothers by month, Chiúta district, Mozambique

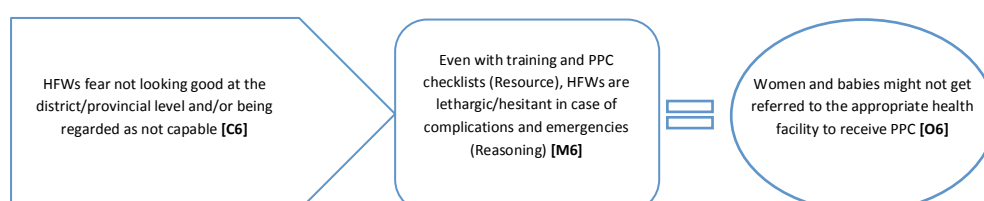


- 1 = 9-20 Sep 2013: Training of 10 facility health workers (MCH nurses and health officers) on PPC, PP risk assessment and the use of the checklist; 23-24 Sep 2013: Pre-intervention visit of all health facilities by MOMI supervisor. Checklist were distributed to all facilities and the used of this list was again explained (1st time explained during training above)
- 2 = Oct 2013: Start implementation PPC MOMI intervention at health facility level in Manje HC, Kaunda HC and Madvuzi Ponte HC
- 3 = 4-6 Feb 2014: 1st field visit/supervision of all MOMI project health facilities. Field visit/supervision conducted in cooperation with MOMI FMUP team
- 4 = Mar 2014: Start implementation PPC MOMI intervention at health facility level in Kazula HC
- 5 = 4-6 Apr 2014: 2nd supportive supervision of all MOMI project health facilities. All HFs were visited. Supervision was conducted by Dr Foia (district health officer and MOMI responsible of MOMI implementation at district level) and nurse Berta together with the MOMI coordinator based in Maputo
- 6 = 9-13 Jun 2014: 3rd supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed. Conducted by Dr Foia and nurse Berta
- 7 = Jul 2014: Establishment of communication system for referral between type I and type II Health Centres in Manje (use of toll free number)
- 8 = 17-27 Nov 2014: 4th supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed and to access to the work flow between the HW and the CW on the check list 1 and on complications referrals. Conducted by Dr Foia and nurse Berta
- 9 = 26-27 Jan 2015: Training of 16 facility health worker (MCH nurses and health officers) on the use of the check list 2, and also refresher training on use of the check list 1 and its challenges

Figure 39 – Facility checklist use and referral for babies by month, Chiúta district, Mozambique



Therefore, HFWs fear not looking good at the district/provincial level and/or being regarded as not capable (Context 6). Even with training and PPC checklists (Resource 6), HFWs are lethargic/hesitant in case of complications and emergencies (Reasoning 6). As a result women and babies might not get referred to the appropriate health facility to receive PPC (Outcome 6).



C. Integration of maternal and infant services

Intervention 3 aimed to integrate services for mothers with services for infants, concentrating material and human resources in one place. Additionally, women would receive all services needed in 'one-stop', significantly reducing the time they have to spend at the HF. That level of integration was only achieved in the smallest HF, where services such as PPC, antenatal care, vaccination, growth monitoring, FP, consults for children at risk, diagnosis of infections, treatment of opportunistic infections, prevention of mother to child HIV/AIDS transmission and treatment of STIs are all provided in a small room (9m²) by the MCH nurse and EPI technician. Women therefore only have to queue in one place and receive all the services they need at once by going first to the EPI technician's desk and then to the nurse's, resulting in less waiting time but also in a lack of privacy. The other two peripheral HFs have partially integrated services – for example mother and child consults are done together with the use of checklists – but the 'one-stop' approach was never completely fulfilled. The largest HF, with more resources, on the other hand did not integrate services and integration is reduced to referring women from one department to the other.

The main barrier to implementation of service integration is the delimitation of roles at the HF. This demarcation heightens in bigger health facilities with more HFWs, where each sector has its own space. In contrast with small HFs where space and personnel are scarce, overlapping of PPC activities was more likely to happen.

"The nurse responded that consultations were not integrated because the offices were divided per services, a paediatric screening room, MCH sector and EPI sector but there was interaction and referrals between services."
(Field observations)

"We noted that there is an interpretation that the services have to be broken down, where for example, the MCH Nurse, says she cannot vaccinate babies because it is the work of her EPI colleague, before she did it when there was no technician for the area." (Field observations)

"No, previously, I used to vaccinate, but now the owner of the area does it."
(HFW₆, MCH sector)

In the small HFs, it was further observed that in the absence of the MCH nurse, the other HFWs showed some reluctance to take over her duties causing a decrease in maternal services provision and PPC activities implementation. Some HFWs reported they also did not

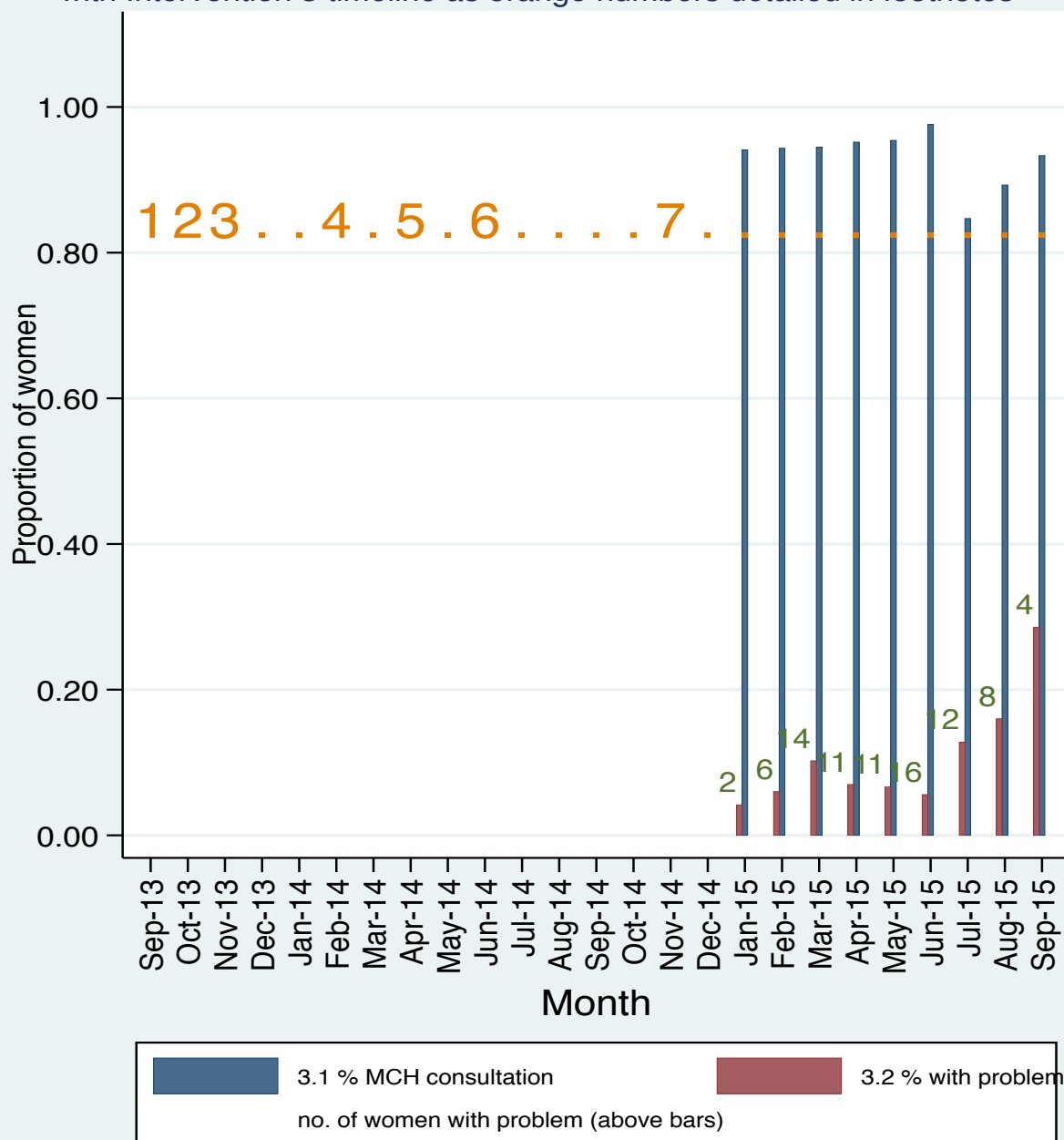
know how to fill out the registers at the MCH sector when they have to take over in the absence of the MCH nurse.

“As preventive medicine officer I have no right to observe [women in the absence of the MCH nurse], I just get data, make a transfer note and send for screening.” (HFW 7, EPI sector)

Figure 40 shows the proportion of mothers attending the child vaccination clinic who were given a mother and child health (MCH) consultation by month for all four facilities in Chuíta combined. Data is only available for 2015 and it indicates that almost 100% of women were offered the integrated MCH services when they took their child to the vaccination clinic (blue bars, Figure 40). This contradicts the qualitative data and field observations summarised above. The proportion of women who were found to have problems at their consultation was found to increase from around 5% in January 2015 to reach a peak of around 30% by September 2015. It is unclear whether this was due to better diagnosis, increased complications, or poor record keeping and data collection – the latter being of concern especially given the contradiction of the MCH consultation data. Figure A7.18 in Appendix 7 shows this data by facility.

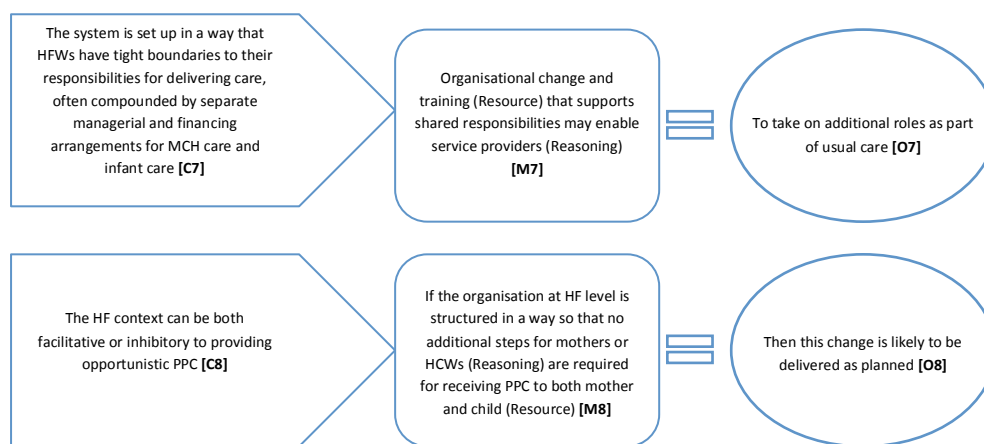
Figure 40 - Child vaccination clinic and MCH consultation integration by month, Chiúta district, Mozambique

Proportion of mothers attending the child vaccination clinic who had a MCH consultation and who were found to have a problem by month by facility with Intervention 3 timeline as orange numbers detailed in footnotes



- 1 = 9-20 Sep 2013: Training of MCH nurses and health officers (Agentes de Medicina) on integration of maternal and infant services (same training session as mentioned for Interventions 1 and 2—same 10 health workers)
- 2 = Oct 2013: Reorganization and integration of maternal and infant services
- 3 = Nov 2013: Start providing integrated services for mother and infants by the same nurse, during the same visit. Integrated care offered during the 42 days after childbirth and in long-term care (vaccination calendar) in all HFs covered by the project
- 4 = 4-6 Feb 2014: 1st field visit/supervision of all MOMI project health facilities. Field visit/supervision conducted in cooperation with MOMI FMUP team
- 5 = 4-6 Apr 2014: 2nd supportive supervision of all MOMI project health facilities. All HFs were visited. Supervision was conducted by Dr Foia (district health officer and MOMI responsible of MOMI implementation at district level) and nurse Berta together with the MOMI coordinator based in Maputo
- 6 = 9-13 Jun 2014: 3rd supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed. Conducted by Dr Foia and nurse Berta
- 7 = 17-27 Nov 2014: 4th supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed and to assess the work flow between the HW and the CHW on the check list 1 and on complications referrals and to assess the acceptability of the DIU. Conducted by Dr Foia and nurse Berta

Thus, the system is set up in a way that HFWs have tight boundaries to their responsibilities for delivering care, often compounded by separate managerial and financing arrangements for MCH care and infant care (Context 7). Organisational change and training (Resource 7) that supports shared responsibilities may enable service providers (Reasoning 7) to take on additional roles as part of usual care (Outcome 7). But the HF context can be both facilitative or inhibitory to providing opportunistic PPC (Context 8), if the organisation at HF level is structured in a way so that no additional steps for mothers or HFWs (Reasoning 8) are required for receiving PPC to both mother and child (Resource 8) then this change is likely to be delivered as planned (Outcome 8). Implementation of service integration is also dependent on the motivation of HFWs, we will see in the next section the factors hindering their motivation.



D. Motivations of HFWs to deliver the PPC interventions

Most HFWs interviewed received the training that addressed the three interventions and the general reception of the training was good.

“It was great, because it made us have more attention – some things we had forgotten, but with the procedures from the checklist, we remember something – attention on the mother and the baby is much better with the items from the checklist.” (HFW_s, Screening sector)

However, not everyone in the EPI sector received the training when they are the first point of contact (and many times the only one) with the women in the postpartum period. As a result, the HFW in this sector will not fill in checklists or integrate services.

“The EPI technician that has recently been allocated to the HF has not received any training. This reflects directly in his day-to-day work where, unlike in Case 1 and Case 2, the EPI sector does not integrate postpartum consultation with vaccinations.” (Field observations)

Generally, there was a lack of initiative from the HFWs who received the training to provide on-job training to colleagues that did not or to new comers, even when they were key colleagues to involve in the implementation of the MOMI activities. Those concerned described that they have no idea on how to use the tools and would be willing to be taught. It was also observed that the gaps in service integration are linked to a key HFW not trained.

“It is something good, for example; postpartum consultations, if I had an opportunity to learn, I would love to learn because I appreciate when my colleague is doing it, only that I did not know what it was all about.” (HFW₂, EPI sector)

In addition, a toll free number was introduced to support HFWs by connecting them with the district nurse whom they can contact to ask questions or assistance in case of complications. The HFWs in the most remote HF mention it in particular, but it seems that there have been several technical issues with the number and could not be used as intended during most of the implementation period.

HFWs interviewed were reluctant to express themselves on how they felt about supervision visits. Only one HFW, working in one of the peripheral and remote HFs, put forward how she felt about the supervision, which she found supportive.

“They take a look at the checklist, the work, the service, the way the checklist is being filling out, if it is being well filled in, if there are difficulties, they help to provide solutions. (...) I feel it is very good because I can be doing what I think is correct but when in real sense it is not alright when supervision is undertaken, it is very good as it help us to remedy certain difficulties for example; I can participate in a training and not grasp everything and when I get on the ground I do the opposite, so when we have a supervisory visit, for me it is always good, it is positive”. (HFW₃, MCH sector)

In a different HF, a supervision visit was observed and the MCH nurse there was quite nervous as she had misdiagnosed a couple of women in the maternity while the EPI technician was very happy given he had done everything right with filling out the checklists in front of the supervision team. Altogether, it is very difficult to comment on the impact of supervisions on the HFWs' motivation and service delivery as several HFWs did not receive

supervision visits, which could also explain the varying degrees of implementation across the sites.

It was also observed that in all HFs, there is a general lack of leadership from the HFW in charge in regards to the interventions implemented which translated into a lack of commitment and sense of responsibility in the HFWs working in the HFs. In one of the HF, informal conversations with healthcare workers revealed that they got the information that a couple of persons in charge receives a monthly allowance from the project (for their role as MOMI researchers) which they felt was unfair and demotivated them to implement the activities related to postpartum care.

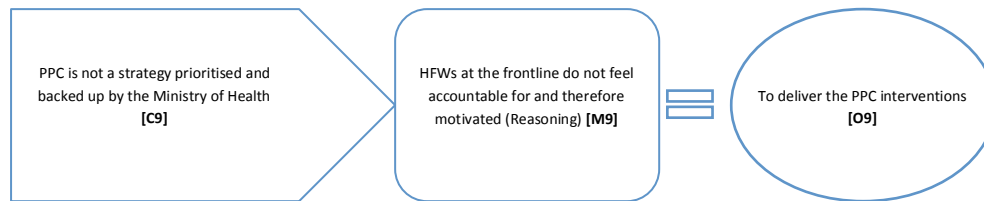
“Health workers seemed to have this information and did not understand why some received allowances when they were the ones doing most of the work. The fact that the activities of paid members were not visible to all did generate an environment of demotivation and negligence regarding the PPC interventions.” (Field observations)

Activities related to PPC however have been implemented in the peripheral HFs albeit with some gaps as seen earlier and inconsistencies. In the larger HF, with more material and human resources however the activities, in particular service integration, were less implemented due to a mixture of factors – we have described some of those factors previously.

Observations also revealed that the fact that PPC is not a high priority at the national level also explains the lack of motivation of the HFWs to implement related activities. Indeed, filling out registers and writing up reports are responsibilities for which HFWs spend a great amount of their time. Looking into the registers used by the HFWs, they do not contain indicators for the first, second and third postpartum consultations for mothers, the focus seem to be on antenatal care, delivery, family planning, vaccination, HIV, malaria and nutrition. There are no indicators either that would measure performance on integration of services. Furthermore, the checklists for PPC introduced did not have the Ministry of Health logo, which seems to be interpreted as less important of a tool to use than those of the Ministry.

To conclude, the relationship between the provincial, district and the local health facilities shapes the motivation of HFWs to deliver the PPC interventions. We have seen previously the lethargy of HFWs around referral cases for fear of not looking good at the

district level and above.. Furthermore, PPC is not a strategy prioritised and backed up by the Ministry of Health (Context 9). Thus, HFWs at the frontline do not feel accountable for and therefore motivated (Reasoning 9) to deliver the PPC interventions (Outcome 9).



6.6.2 Provision of Postpartum Family Planning

Nurses working in the HFs received training from MOMI ICRH-M/UEM on PPFP, with an emphasis on IUD insertion as the majority of nurses involved lacked the capability (Intervention 2).

“For example, I did not know how to insert IUDs, for me it was very positive, I learnt to insert IUDs.” (HFW₅, Screening sector)



Nurses at the MOMI training on IUD insertion – September 2013

However, the number of IUDs inserted remains low in all HFs compared to other FP methods. One of the main factors is the low acceptability from women of the methods. Yet, hindering factors have also been identified on the side of provision. A few HFWs described that women are briefed on immediate IUD insertion during antenatal consultations and asked again before delivery. But observations of family planning counselling revealed that HFWs explain

what are the different family planning methods available and let the mother pick but do not educate women on the advantages and disadvantages of each methods. They also do not take the medical history to know if the mother has had side effects in the past with her method or a clinical examination to know if the method is appropriate for the mother. For example, several postpartum women interviewed did not know what IUDs were and knew only about pills and Depo-Provera injections. Women thus lack information on FP to make an informed decision regarding contraception, information that they do not get either from CHWs (for women living in communities with a CHW), who promote the use of family

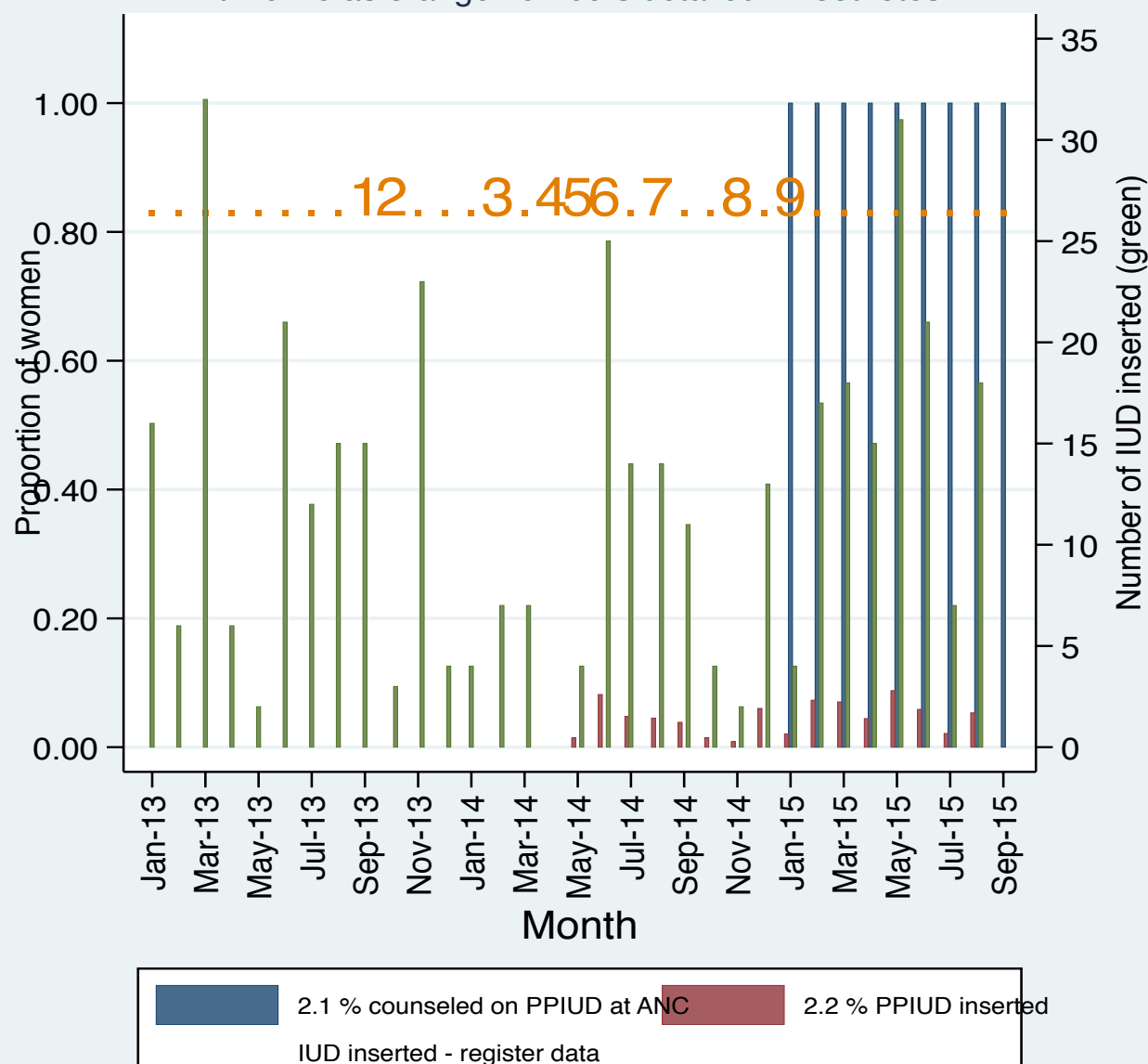
planning in the community but do not mention specific methods. Therefore, women mainly pick the methods they know the most about: Depo-Provera injections and pills, even when contraindicated. Another hindering factor is that the EPI technicians – who are the first point of contact at the HF for women – lack knowledge and training on FP and therefore can only provide pills, condoms and injections when asked about FP by the mothers. Therefore if women are not counselled and referred after vaccination to the MCH nurse, especially when services are not integrated, the women will not receive postpartum FP.

Figure 41 shows the numbers and proportions of women counselled on postpartum intra-uterine device (PPIUD) insertion and who had a PPIUD inserted, by month for all four facilities combined in Chiúta district. The counselling data (blue bars) is only from January to September 2015 and is at 100% for all of these months, so perhaps not credible. The proportion of women who had IUDs inserted postpartum (PPIUD) as indicated by MOMI monitoring data collection goes up and down and up and down again between May 2014 and August 2015, when there is data available, reaching almost 10% in some months (red bars, Figure 41). This may, or may not be associated with MOMI intervention 3 activities. The number of IUD inserted according to health facility records also fluctuates up and down from January 2013 onwards (green bars). Figure A7.19 in Appendix 7 shows PPIUD data by facility.

Figure 42 shows the number of women using other family planning methods by month for all four facilities combined according to health facility register data. Contraceptive pills are the most popular method (blue bars, Figure 42), followed by Depo-Provera (red bars) which is used by about a third to half as many women; hardly any women were recorded to use implants (green bars, barely visible on Figure 42). The trend in the use of these other family planning methods is highly variable with three waves of increased use recorded, one during each of the three years 2013, 2014 and 2015. This suggests no link to MOMI interventions. Figure A7.20 in Appendix 7 shows this data by facility.

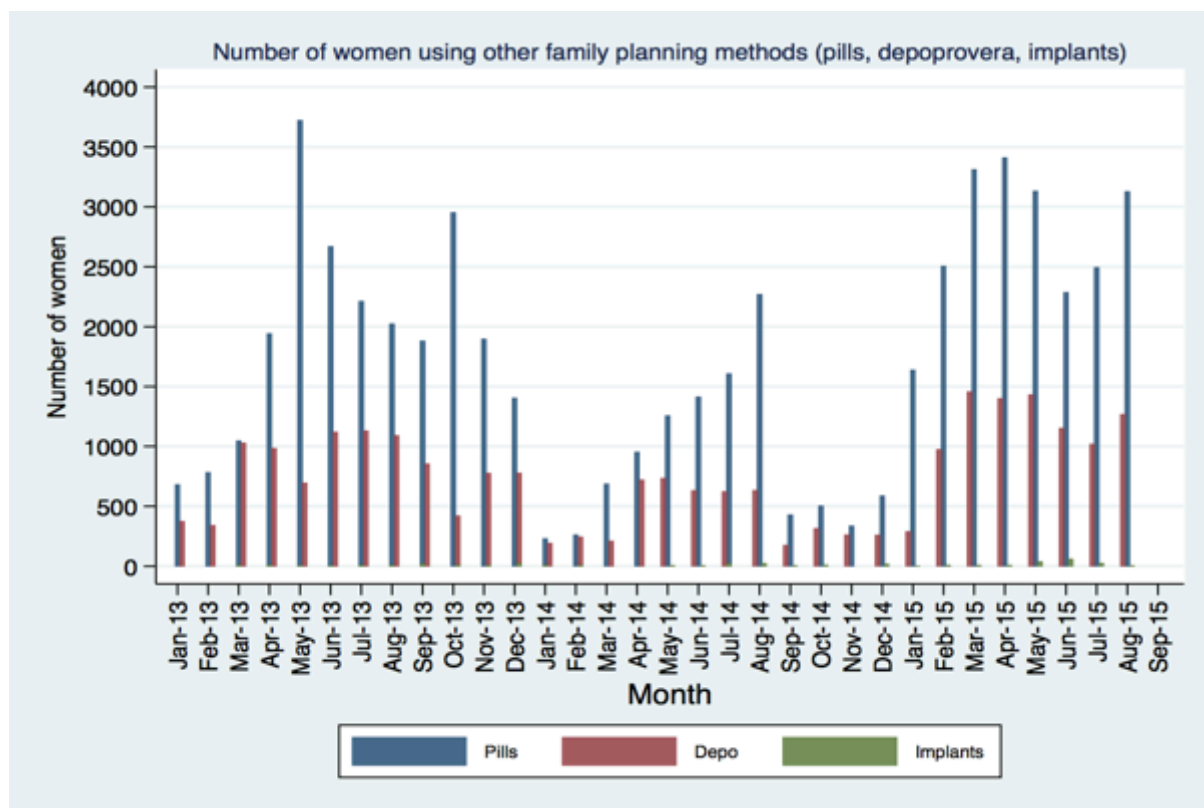
Figure 41 – PPIUD by month, all facilities combined, Chiúta district, Mozambique

Proportion of mothers counseled on PPIUD during antenatal care and with PPIUD inserted after delivery by month by facility with Intervention 2 timeline as orange numbers detailed in footnotes



- 1 = 9-13 Sep 2013: Training of MCH nurses and health officers -Agentes de Medicina- on PPFP, including PPIUD, -10 in total, training is part of the training mentioned in Intervention 1 that had place between 9 and 20 Sep 2013
- 2 = Oct 2013: Start MOMI PPFP intervention implementation at health facilities
- 3 = 4-6 Feb 2014: 1st field visit/supervision of all MOMI project health facilities. Field visit/supervision conducted in cooperation with MOMI FMUP team
- 4 = 4-6 Apr 2014: 2nd supportive supervision of all MOMI project health facilities. All HFs were visited. Supervision was conducted by Dr Foia, district health officer and MOMI responsible of MOMI implementation at district level, and nurse Berta together with the MOMI coordinator based in Maputo
- 5 = Mar, Apr and May 2014: The health sector of the Chiuta District realized mobile health team visits to the communities of Daka, Chiritse, Malolo, Lumadzi, Zeze-lipakwe, Zuzecamama, Goloi, Camulambe 2, Nhantsato, Cachere, Mpondo, Tsemene, Chicote, Chimpunga, Chithapsu, Capalautsi, Muchena & Mantsamba. The activities integrate Vaccination, Vitamin A supplementation, deworming, ANC, FP and PPC. Concerning FP and PPC, 948 women had a consultation on family planning and 201 had a post-partum consultation
- 6 = 9-13 Jun 2014: 3rd supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed. Conducted by Dr Foia and nurse Berta
- 7 = 16 and 30 Jun; 18, 21, 23, 28 and 30 Jul; 18, 20 and 22 Aug 2014: The health sector of the Chiuta District realized mobile health team visits to the communities of Daka, Chiritse, Malolo, Zuze-Lipakwe, Zuze-Canhama, Goloi, Mpondo, Capalautsi, Nfigo, Samica, Chicoco, Muchena, Mantsamba, Sapemba. The activities integrate Vaccination, Vitamin A supplementation, deworming, ANC, FP and PPC. Concerning FP and PPC, 316 women had a family planning consultation
- 8 = 17-27 Nov 2014: 4th supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed and to assess the work flow between the HW and the CHW on the check list 1 and on complications referrals and to assess the acceptability of the IUD. Conducted by Dr Foia and nurse Berta
- 9 = 26 Jan 2015: Distribution of FP materials -booklets- at health facilities

Figure 42 – Number of women using other family planning methods than PPIUD, by month, all facilities combined, Chiúta district, Mozambique



Regarding demand for postpartum family planning, several factors were identified that explain the low uptake of FP by women especially regarding IUDs. We have mentioned that women generally lack information regarding FP. Additionally, in some HFs, the space is organised in such a way that women do not have any privacy while receiving FP, including IUDs.

Another important factor to consider is that a majority of women do not believe postpartum family planning is necessary since, according to cultural practices in their community, to avoid the baby getting sick a woman cannot have sex with her partner after delivery until the baby is two years old. Therefore the postpartum women interviewed that practice this abstinence do not have the need for FP and would rather have their husbands frequent other women than risk the health of the baby.

“- Why not doing family planning?

- Because I cannot have sex with him [the husband] as the child can fall sick.”

(Woman₅)

“Yes he can find another woman, there is no problem [laughs]. I cannot risk my son, he is too small.” (Woman₃)

Women interviewed also put forward that their community do not accept FP and women are told that FP will make them infertile.

“[The community] do not accept that women should make family planning. (...) They say: you girls, do not do family planning as one day you will become infertile.” (Woman₅)

HFWs also reported the same but that the work of the CHWs and TBAs in raising awareness around FP has had an impact and therefore more women are now coming to the HF for family planning.

“Others say they cannot do family planning because by doing family planning you end up killing all children, and end up having trouble in conceiving. At some point that is what is spoken in the community, but with the help of the APEs and traditional birth attendants, family planning is already having a lot of influx.” (HFW₃, MCH sector)

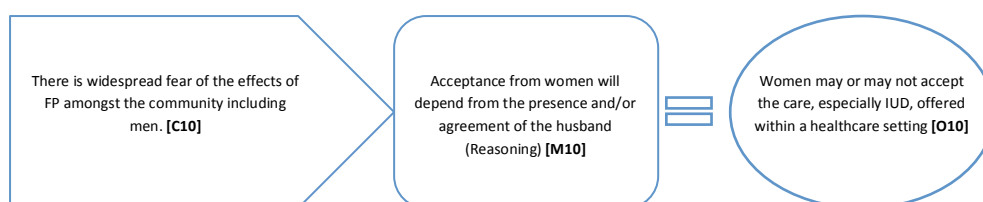
The role of the husband is also crucial in the decision-making process of postpartum women regarding FP. HFWs interviewed explained that women need permission from the husband before they would accept a FP method, even more so regarding IUDs. This is confirmed by the interviews with postpartum women already on family planning who all expressed that they had the permission of their husbands. The majority of husbands however are against IUDs since the general belief in the community is that IUDs are only for women who want to stop having children definitely.

“[Women don’t like IUD] because their husbands do not accept, they only accept tablets, injection and implant.” (Woman₆)

“Many women do not use IUD, because they say they still want to have babies.” (CHW₂)

“Those who no longer want to deliver adhere to IUD.” (HFW₄, MCH sector)

In conclusion, women need more counselling on family planning in particular about the pros and cons of the different methods and which one is best suited to their situation. Furthermore, there is widespread fear of the effects of family planning amongst the communities including men (Context 10). When offered PPFP at the HF (Resource 10), acceptance from women will depend from the presence and/or agreement of the husband (Reasoning 10). Therefore women may or may not accept the care, especially with IUD, offered within the healthcare setting (Outcome 10).



6.7 Conclusions on MOMI implementation in Mozambique

Below, we summarise the findings of the MOMI implementation in Malawi and the factors that have an impact on MOMI's objectives: increasing the demand for and improving the provision of PPC.

Overall, the implementation of MOMI interventions in Mozambique faced important structural barriers that would need strong political will and commitment at district, provincial and national levels to overcome. The evaluation results show that although the implementation strength was weak there is potential for change, especially in the community. The main findings are summarised in the box below.

Degree of MOMI implementation in Mozambique:

- There was a poor understanding of interventions (e.g. use of checklist, integration of services) at the start of the intervention. However this improved during implementation.
- Implementation of community and HF-based interventions was hindered by important structural barriers (e.g. communities and HFs scattered over large areas with little or no roads).
- The MOMI community intervention increased attendance to the HF for deliveries and postpartum care and women's health-seeking behaviours have started to evolve away from traditional medicine.
- The cooperation between APEs and TBAs is seen as one of the major achievements of the MOMI project as it facilitated acceptance from women for postpartum care.
- Training of HFWs working in the EPI sector – main point of entry at the HF for women since it is where infants are vaccinated – is lacking.

Factors influencing demand of women for PPC:

- APEs are highly motivated and are driven by the need and will to help their own community but APEs encounter many hindrances (e.g. small number of APEs is serving several remote communities scattered over huge distances). The message on the importance of PPC thus does not reach the majority of women. Furthermore, women attending the HF for infants' vaccination are not told by HFWs about the importance of PPC and the existence of a postpartum visits schedule.
- APEs are trusted in the community and seen, in a context of remoteness, as the only connection to the HF.
- Communities served by the HFs are remote and lack infrastructure connecting them to the HFs and transportation, when available, is costly hindering women from attending the HF.
- Negative attitude of some HFWs has an impact on women's attendance for PPC if women are scared of HFWs being angry at them for delivering at home.
- Women (and their families) rely heavily on traditional medicine since it is readily available compared to the HFs that are very difficult to reach.
- Low acceptability from women of PPFP methods, especially IUDs, because of lack of knowledge on the advantages and disadvantages of each method and the need to get their husband's permission.

Factors influencing provision of PPC by HFWs:

- Although HFWs agreed the PPC checklists are easy to use, not all HFWs involved in MCH fill out the checklists and their use is quite inconsistent. Smaller HFs seem to have a better integrated use of checklists.
- Checklists are not filled out in the EPI sector (with the exception of one HF) –the main point of entry at the HF for women – mainly due to lack of training and barriers to service integration.
- Several factors were identified that hinder the use of checklists and provision of PPC: prolonged absences of the MCH nurse in 2 small HFs; women do not show they are in pain due to local culture; and several HFWs are not inclined to open checklists for women that did not deliver at the HF.
- The culture around referrals is very negative whereby HFWs are reluctant to refer patients with complications – even when the complication is correctly diagnosed – for fear it will be perceived at a higher level of leadership as a sign that the HF is incapable.
- A general lack of leadership from the HFW in charge in regards to the interventions implemented combined with PPC not seen as a high priority at the national level were translated into a lack of commitment and sense of responsibility in the HFWs working in the HFs.

Chapter 7 – Discussion

7.1 Cross-country analysis

The MOMI programme was a Health Systems research intervention which took recommended best practice in postpartum care and, through a range of interventions and processes designed to build sustainable implementation strategies, aimed to improve postpartum care delivery and ultimately maternal and child health outcomes in all four countries. The most important feature here was not the intervention itself but the question of whether health system strengthening, stakeholder engagement and capacity building could successfully and sustainably take hold without the injection of additional resources. As such, we present results in the light of what can be expected in a real system context and make assertions about where the focus of efforts for scale up should be emphasised.

Conceptual complexity as well as health system complexity meant that a model of linear causality for the evaluation would not have been appropriate. Realist methods offer the opportunity for studying complexity, but are relatively uncharted territory methodologically for evaluating health system change in low- and middle-income countries (LMIC) settings. The challenge has been to capture the influences of macro, meso and micro strata of the health system on the interventions, across different territories, over a time and in spite of a changing political, policy and social context.

Within this dynamic and complex environment, the evaluation set out to understand both the process of implementation and the preconditions that are likely to favour the achievement of the desired outcomes more likely. Realist methods were useful to determine consistencies at the level of intervention implementation but were supplemented by other frameworks such as CFIR to further analyse the impacts of the wider contexts.

One of the theories common across the countries revolves around the context of rural health settings in these remote districts. Increased geographical isolation tends to be associated with professional isolation and this perhaps fosters a greater receptivity to training and the use of tools (checklist, guidelines) provided. While in urban settings, it is more likely for such training to be linked to economic gains as observed in most countries. But it is difficult to generalise, since the theory outcome is also influenced by the nature and

level of commitment of the organisations and individuals involved (self-efficacy, motivation, belief). Even when new skills are acquired or existing skills upgraded, the impacts of training and capacity building deteriorate over time. Also new guidelines and technology constantly emerge and therefore need to be periodically updated through refresher trainings, regular mentorship and feedback sessions. These themes were common across all the sites.

7.1.1 Implementation Strength

The impact of the interventions in each country is examined in relation to its implementation strength. Figure 43 provides a visual representation of implementation strength across the four intervention sites. A summary table providing an explanation of the scores for each of the country level constructs is provided in the Table 10.

We have conceptualised implementation as a product of dose, intensity, fidelity, specificity and duration; where dose refers to the amount of input activities into the programme, duration refers to the length of programme implementation, intensity refers to the quality of the implementation processes, specificity refers to conceptual clarity regarding the intervention and fidelity refers to the level of adherence to the programme objectives. There were large disparities as well as similarities between settings. For instance the intervention ‘dose’ was high in Burkina Faso and Kenya while it was relatively lower in Mozambique and particularly low in Malawi. Most sites were able to implement the interventions over a period of 18-24 months although the intensity with which the interventions were applied varied across sites. Interventions are usually ambitious in their plans regarding supervisory visits (categorised as intervention intensity). Ideally supervisory visits perhaps would be conducted on a monthly basis but realistically it is more likely to be conducted on a quarterly basis. Intervention fidelity was low amongst all sites except Burkina Faso, where interventions were executed as it was originally planned.

Interpretation of cross-country comparisons with the data available needs to be done with some caution. For instance, in terms of intervention fidelity, Burkina Faso has very minimal difference between planned and actual implementation as compared to other sites. But should the implementation be considered of poor fidelity if the intervention deviates from original protocol as in the case of Kenya or Malawi? For complex interventions, it is likely that the intervention will deviate from the protocol and in most cases this is essential

Table 10 – Explanation of the implementation strength scores for each country

Burkina Faso

Dose	100% of the activities listed in the Gantt Chart (2013) completed	5
Duration	When comparing to Gantt chart of planned activities we can see that intervention 1 started on time and interventions 2 and 3 started with a delay of 3 and 4 months, respectively. The interventions were implemented over a period of 24 months.	4
Intensity	Yearly refresher training was conducted to deal with high staff turnover. PPC guidelines & checklists to support PPC consultation at HF. 72 AVs (1 per community) received training and quarterly supervisions by MOMI IRSS. Feedback from supervision provided	5
Specificity	Lack of understanding about how care delivery processes have changed. The interview data suggests that staff did not feel that the care being implemented was substantially different from what they were already delivering. On the one hand they expressed that the interventions were very easily delivered, fitting well with current practices, but on the other hand there did not appear to have been a substantial shift in planned or actual practices.	3
Fidelity	AVs were able to describe in detail the danger signs in women and infants to look for in the postpartum period and knew the PPC visit schedule at the HF.	5

Kenya

Dose	All trainings conducted as planned. 546 CHWs trained in dialogue model.-poor retention. Dialogue model introduced in 12 community units. 2 picture books provided in all the 10 health facilities.300 picture cards distributed among CHWs	4
Duration	Activities were implemented as per scheduled plan. Interventions started around July/Sep 2013 and lasted a period of 24 months. Dialogue sessions in health facilities in Jan 2014.	4
Intensity	7/28 planned supervisory visits to the health facilities conducted for intervention-1. Regular field visits and supervision are conducted in all the 10 health facilities. At the end of each DM session action plans are discussed but not documented on paper. The dialogue models were also initially restricted to family planning, but later extended to include other PPC topics.	3
Specificity	It is assumed that the dialogue model would lead to increased knowledge and uptake of PPFP during the first year after delivery. The process pathway on how this will be achieved is lacking in clarity. There seems to be considerable overlap between health education provided by the CHWs and the dialogue sessions suggested by MOMI. The distinction between the 2 approaches and the purpose that they serve needs clarification. Although interventions were developed context specific by the stakeholders, some of the activities (eg DM in health facilities) had to be withdrawn.	2
Fidelity	VSLAs not part of the original implementation plan, was implemented by MOMI -2 CHW loan savings in Jan'15 (xx members) good retention rate. While the 4 CUs selected for the VSLA training were mainly those that were strong in conducting the dialogue sessions, the link between the two is not well understood i.e if the VSLA strategy was better than dialogue model or complements dialogue model. Orientation on VSLA done in Oct'14. By Jan 2015, it was decided that the dialogue model would be discontinued in the health facilities because it was not practical and feasible to arrange these sessions at the facility level. Death reviews were planned to be conducted in 2015, but the status of that is unknown. Fidelity was poor because it could not achieve the objective of community engagement. The intervention was focussed on the CHWs rather than on communities.	2

Malawi

Dose	Delay in the implementation of activities. Guidelines for PPC finalised in Sep'13 (v/s Jun'13). Review of facility MNDSR not conducted (MDSR committee formulated). Community sensitization meetings on PPFP conducted in Feb'14 (v/s Sep'13). Community intervention manuals and tools scheduled for Jul'13 was completed in Aug'14.	2
Duration	Training of community health facilitators was delayed by a year (Aug/13 v/v Aug'14). Even so, training was incomplete for the community interventions. The facility interventions were implemented for a very short period of time. Most of the community intervention projects were still in the very early stages of implementation even as the project was coming to a close in 2015.	3
Intensity	Field visit summary notes from 2013 observed very little progress and slow process of implementation of activities. Supervision and mentorship for the community teams was not provided. Limited (n) supervision throughout the Ntchisi district implementation team was conducted in the health centre. Feedback mechanisms were not established.	2
Specificity	There was a range of activities that were planned without giving much thought into the execution of those plans. The community interventions were overwhelming with women's group style community group meetings to be held with women's groups, men's groups and adolescent groups. In addition there were also dialogue sessions planned in the community. The capacity to deliver such an intense community intervention does not seem to have been thought through. Moreover, the strategy was to implement through existing health systems structures which proved to be a challenge, given the competing priorities that exist in the Malawian health system.	3
Fidelity	Community intervention using male PPFP motivators was never rolled out in the project nor did the community health dialogue sessions take place. Intervention means to support community engagement remained poor	2

Mozambique

Dose	A total of 3/11 planned supervisory visits were conducted in the communities for Intervent -I. For Intervent -II in HF, 6/28 on-job-training and supervision conducted.	2
Duration	Distribution of IEC materials on PPC scheduled for Q4 2014 distributed in Jan'15.	3
Intensity	Significant delays especially in implementation of community interventions. Intervention-1 training planned for community in Sep'13 took place in Apr'14. Variable level of implementation throughout the project, improved in 2015 after refresher training (Jan'15 & Apr'15 not included in the initial workplan) and increased supervision. For Intervent -3, 6/30 supervisory visits (by provincial level?) completed. HFWs did not receive adequate supervision.	2
Specificity	Poor understanding of interventions (e.g. use of check-list, integration of services) at the start of the intervention. However this was well accepted towards the end of the project in 2015. There is an assumption that use of checklist will improve early detection and timely referral of postpartum complications. The conceptual pathway for this is not clarified in the project. Clarity on the concept of 'one-stop shop' lacking.	2
Fidelity	Establishment of a referral toll free number was shelved.	3

since the intervention is adjusting to the context and in the case of MOMI, based on interventions formulated through stakeholder engagement. We see this in the case of some MOMI interventions such as VSLAs in Kenya and the exit of referral toll free service in Mozambique due to technical difficulties with the phone service. Adaptability (rather than conformity) is a key feature of complex interventions. Our fidelity score is thus based on adherence to programme objective rather than adherence to intervention activities.

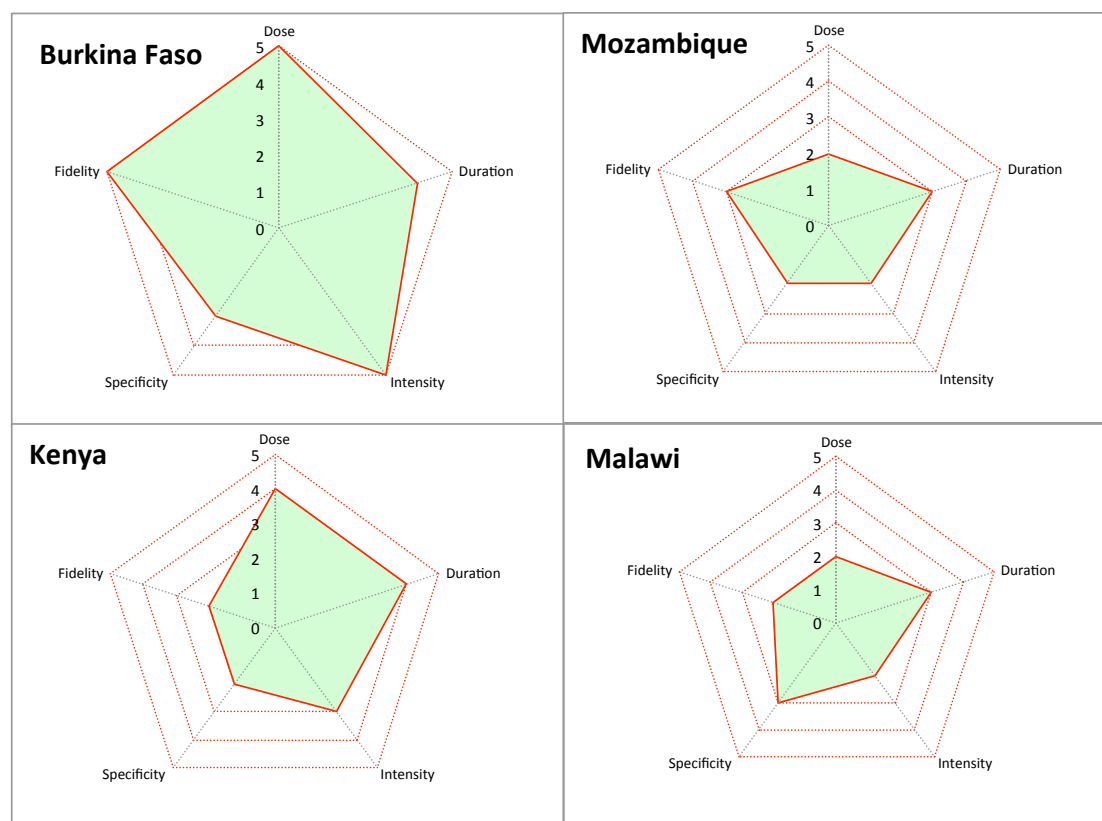


Figure 43 – Implementation Strength: Cross-country comparison

Intervention theories postulate ‘how’ an intervention is likely to have shown effect. This is known as the Theory of Change or initial programme theory (Figure 44). It is therefore important to study these theories especially for complex social interventions since their process pathways are not well known or well established. However, for the theories to manifest, the interventions have to have been implemented to a minimum threshold referred to as the implementation strength. We have attempted to describe the implementation strength in terms of the dose, duration, intensity, specificity and fidelity of the intervention. Changes to the expected outcome in the postulated theory of change can be explained simply in terms of its implementation strength (Figure 44).

However, there are three issues, which need to be considered in this simple framework. Firstly, it is difficult to determine what the implementation threshold for an intervention based purely on its implementation strength. This is related to the second issue that the effect of implementation strength on intervention outcomes is not linear and is greatly affected by the intervention's characteristics. Contemporary literature on implementation strength does not make the distinction between the implementation characteristics and intervention characteristics. Our conceptualisation of implementation strength is purely in terms of the dose, duration, intensity, specificity and fidelity of the intervention while the literature review by Schellenburg *et al.* (2012) includes articles which also represent intervention characteristics (such as leadership, information system, human resource utilisation, quality planning, etc.) as implementation strength. Perhaps it is a nuanced point that needs greater reflection and debate to see if such a distinction between implementation strength and intervention characteristic is indeed warranted. Nevertheless, clarity is required, since inter-comparability of implementation strength across programmes will be determined by what elements we choose, to represent implementation strength. And finally, an intervention is also influenced by its interaction with the context and mechanism by which the intervention is being delivered.

In the figure below, the 'expected outcome' refers to the proposed outcome at the beginning of the intervention i.e. from MOMI's basic program theory. This can also be referred to as the ToC (Theory of Change) or Hypothesis building stage. This differs from the 'actual outcome', which is usually different (and sometimes unintended) from the 'expected outcome'. As mentioned above this can be related to the intervention characteristics as well as influenced by the context in which the intervention is being implemented. We explain this in the next section.

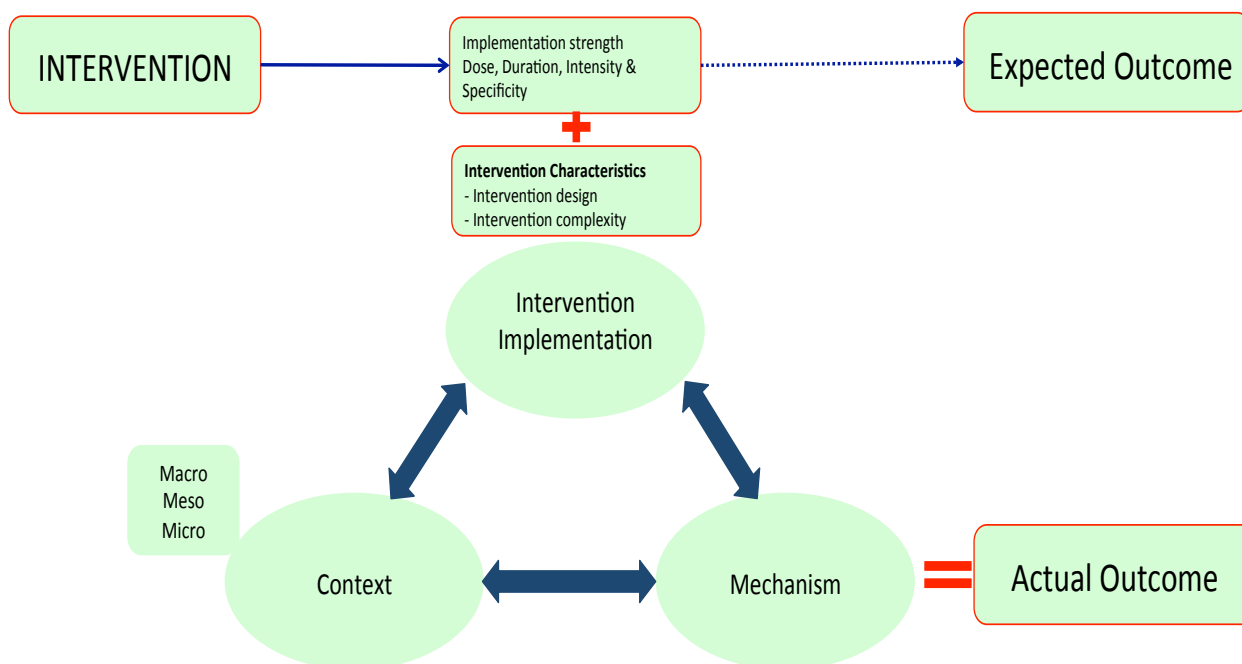


Figure 44 – Relation between implementation, context and mechanism of an intervention

Some of the intervention characteristics that might be different across settings and affected/influenced implementation strength include intervention complexity, choice of topic, innovation, and stakeholder engagement. In Malawi, choice of women’s group intervention has been known, from literature, to have a long latent phase even with trained facilitators in RCT conditions. It was therefore clear from the start that an 18-24 month period would not be enough duration for the community intervention to show effect. In Mozambique the concept of the ‘one-stop shop’ and toll free number for referral system require a greater degree of engagement from the health system, which is difficult to achieve within the project timeframe. Even if the implementation strength in this instance had been high, it would be difficult to observe the outcomes expected out of the intervention within the timeframe of MOMI.

Context also matters; context can be further classified as micro, meso and macro level representing the broader environmental and political context within the health system, the health care service delivery and the community level, respectively. One of the contextual factors influencing the programme outcome considered here is organisational maturity. In the context of MOMI, organisational maturity can be defined in a number of ways such as years of experience of working in maternal and newborn health or postpartum care, the degree, length and quality of stakeholder engagement, number of years in the study sites, relationship with University of Gent. We did not formally evaluate this, but based on field

observation and anecdotal evidence a matrix of the relation between implementation strength and organisational maturity for MOMI's study sites could be represented as in Figure 45. A brief explanation is provided below.

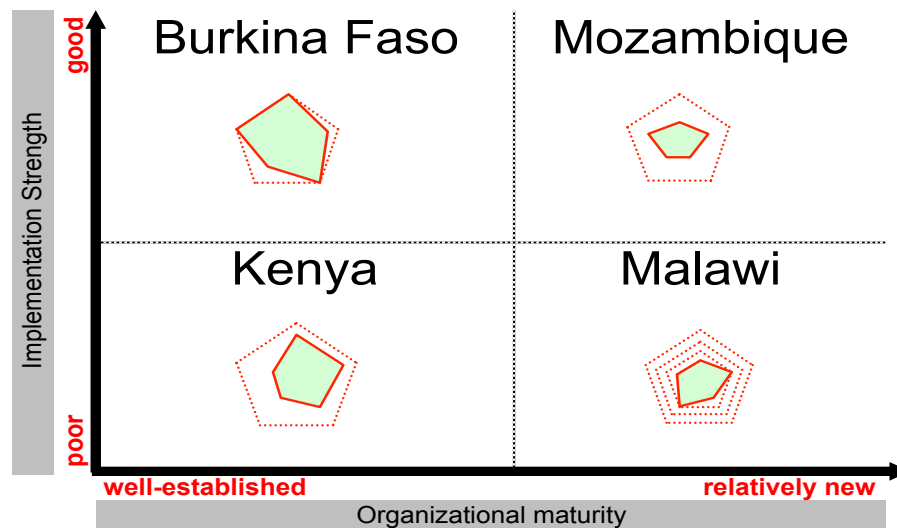


Figure 45 – Relation between implementation strength and context (Organisation maturity)

IRSS has a demographic surveillance site in Kaya, Burkina, much before the MOMI interventions came into being. They share a long-standing relation with their key stakeholders in the study sites. In contrast, Mozambique and Malawi had to establish their presence in the study sites in Chiúta and Ntchisi district respectively whilst at the same time rolling out the interventions. In Mozambique the problem is further complicated by geographic isolation of the study site from Maputo where ICRH-M and UEM are located. Thus the initial set-up time in both the study sites (Mozambique and Malawi) was much longer and needs to be borne in mind when analysing the intervention theories. Despite, similar organisational context, Malawi's implementation strength was relatively poor as compared to Mozambique and this is mainly related to its intervention fidelity. Activities were not implemented and objectives not achieved as planned in the Malawi study site. This could be partly because they were keen to implement the interventions by embedding them within the health system and perhaps under-estimated the health systems complexity to engage with the MOMI strategy. There were also internal issues within the implementing organisation, which perhaps could have influenced the course of implementation. Kenya presents an interesting case study where the dose and duration of the interventions, based on available evidence, is similar to Burkina Faso. Despite being well established in the community for a significant length of time, its implementation strength remained poor

especially in terms of its intervention fidelity, as in the case of Malawi. The reasons for this need further exploration.

We have painted here a broad-brush picture of context. But the influence of context can also be at a much granular level (such as remuneration and motivation of healthcare workers, their linkages with formal health systems) and we need theory-based approaches such as realist evaluation to tease out the intricate relation between context, intervention and its mechanism.

7.1.2 Impact Evaluation

The initial CMO theories were refined by country on the basis of whether they were supported or contradicted by the empirical data. In some cases the implementation of the intervention was insufficient to either prove or disprove theories and in others the data itself was inadequate.

Four broad middle range theories - which have been named “Buzz Theory”, “Bridging Theory”, “Motivation by Accountabilities” and “Together is Stronger” – appeared to underpin whether or not the interventions implemented had an impact at the point of service delivery, despite wide variation in intervention choice, design and delivery across settings and differences within the contexts and systems within which they were implemented. These theories were reached through negotiation and interpretation of the data with members of the research teams across all settings. The strength of this type of analysis is in its ability to reach into the “messiness” of a case study and enhance understanding of context. It therefore adds value to the logical-deductive approach of the quantitative analysis, which in itself does not offer explanations for the data.

A. Demand for postpartum care

A lack of prioritisation of and therefore proactive demand for postpartum care was identified in all four country settings and had been the impetus for the MOMI project. The initial data suggested that this was the result of several factors including an overarching lack of belief in its importance, a perceived lack of receptivity by the health facility, and reinforced by the collective behavioural norms of the community. Women experienced a range of socio-cultural barriers to attending clinic in the postpartum period and often face challenging geographical barriers that disincentivised attendance for any form of routine

MCH care unless it was for the benefit of the infant. However in many countries in Africa, demand side interventions have been effective in shifting demand for care in the antenatal period (Hurst, 2015) even in the most remote communities demonstrating the potential for replication in the postpartum period.

The reasons that women are discouraged from attending for postpartum healthcare were found to vary widely across different contexts studied and included issues such as being required to remain at home for seven days (Mozambique) or forty days after delivery (Kenya) or being required to return rapidly to agricultural duties soon after delivery (in rural study sites). The behavioural impacts of these factors, in turn, depended on many additional contextual considerations such as the pace of social change within the community and the additional barriers of cost, geography and lack of education. Women in urban settings appeared more likely to make their own decisions about postpartum care and family planning whilst the barriers had more impact in some rural settings. Women were often further discouraged by their fear of healthcare workers.

Different levels of social influence prevail over health-seeking behaviour particularly in more rural communities in LMIC countries extending from the domestic household level, and the local community operating through village hierarchies and reinforced by the lack of female gender empowerment (Nikièma *et al.*, 2008). In general, a lack of belief in the power of prevention amongst rural communities in sub-Saharan Africa means that the formal healthcare sector may only be drawn upon as symptoms of illness become recognisable whilst “middle layer” of healthcare including private providers and community health workers are more readily sought (Colvin *et al.*, 2013) for other health-related issues. Within this context, our data reinforced what is already known that the healthcare needs of the child are prioritised over those of the mother but more specifically that there are different levels of community “permission” for different types of health behaviours. Vaccination of infants postpartum and uptake of antenatal care at the health facility tend to be more normalised in the community whilst other aspects of care such as postpartum care and family planning were less likely to be proactively sought and therefore access depended more heavily on integrated care delivery with other aspects of care.

There is relatively little evidence on the influence of social capital and the community norms that drive pro-active care-seeking. Social capital refers to the relationships between

people within the community. It has been described as structural (relating to common behaviours) and cognitive (relating to the development of trust). It can also be considered in terms of “bonding” relationships within a community or “bridging” relationships across communities. Our refined theory through the MOMI evaluation suggests that influences on demand for postpartum care occurring at a community level related to two major mechanisms of social capital – the development of bonding social capital or a “buzz” and bridging social capital enacted through the relationship of women with the community health workers. These factors appear to be leading to initially cognitive changes in the form of building on existing and building new trust relationships, followed by structural or behavioural changes resulting in an increase in healthcare demand. Our data suggested these changes at community level but household level changes were not observed which may have been due to poor implementation, lack of impact or lack of data around the interventions at household level.

B. “Buzz” Theory

Results of the MOMI evaluation suggest that if community level interventions lead to postpartum healthcare seeking for a critical mass of women, a “buzz” for change is created. Reinforced by social cohesion and local dialogue, norms shift and appear to create a critical tipping point leading to a social movement that holds a collective belief in the acceptability of and perceived value of attending for postpartum care that outweighs the costs.

Although it is not possible to ascribe the changing context around level of acceptability of the formal health sector to MOMI activities, it appears that, where interventions were implemented in the community (notably Burkina Faso and Mozambique) MOMI did provide a “nudge” that increased demand for postpartum care which was supported by both quantitative and qualitative data and therefore less likely to be purely social desirability bias. Whilst the conditions for this change needed to be facilitative and could be accelerated by working closely with community leaders and men within the family structures, the community interventions relied on an existing social capital between women in the community and their informal networks of communication. As other studies have demonstrated, social norms amongst a group can be influential and are particularly relevant for close-knit communities that may be more geographically isolated from others but be comprised of members that are themselves relatively proximate (Horwitz *et al.*, 1985). In Mozambique this effect may have been less strong since communities although close knit

are smaller and relatively geographically isolated from one another. This precludes development of the required social capital “threshold” required to influence norms of behaviour. In these cases, structures that engineer the community to facilitate this gain, such as women’s groups may be appropriate but were not considered in the intervention design in Mozambique. Nonetheless it appears that behavioural leaders from within the women or families within the community were themselves seen as powerful agents of change, in this study. Those members of the community likely to benefit most from healthcare seeking behaviours show greater levels of social participation (Lindström *et al.*, 2006) receiving more early exposure to community level social change.

C. Bridging Theory – CHWs linking women to the health facilities

Our findings further supported the concept of social capital as having an important effect on demand for postpartum services mediated through the CHWs who could bridge trust between communities and the formal health sector. The role of CHW was quite different in each of our settings. The degree to which the CHWs are linked to the formal health sector, the range of roles undertaken and the way in which they were reimbursed or incentivised by the system also varied. However, almost regardless of these factors, the CHWs in general held a strong intrinsic sense of responsibility to their communities and, in turn, were closely relied upon by them. This relationship was reinforced when the CHWs were perceived to belong to and be selected by the community they served. The effect was seen amongst rural communities but was less strong in urban settings where the motivating forces for healthcare demand, relationships of the community with CHWs and satisfaction of the CHWs appear to be different.

In some settings, such as Burkina Faso and Mozambique, a high retention of CHWs was seen throughout the period of implementation of the MOMI intervention. Although the incentives that appeared to drive this motivation differed between study sites and between urban and rural communities role identity, status and perceived value was a key motivating factor for the CHWs. Whilst they appear to gain role identity from their status within the community, in order for them to effectively forge links with the formal sector, their recognition here is also important and was established through different mechanisms such as supervision and training, and incentives (both financial and non-financial) all of which built a sense of belonging with the health facility. The elevated status generated was important in terms of individual CHW motivation and in the respect that they were afforded

by the community. Local CHWs already hold the trust of the community and making the health facility links more visible reinforces this trust in the system and establishes connectivity. Visible signs of connection with the formal sector such as MOMI aprons and bicycles, and the use of pictorial checklists appeared to work through this mechanism and be motivating for the CHWs.

Demand generation for postpartum care through this bridging function of CHWs was seen in both Burkina Faso and Mozambique. The APEs were instrumental in women attending from the community in Mozambique for postpartum care whilst penetration into the community was not sufficient to generate the “Buzz” that was captured in Burkina Faso. This was thought to be due to geographical barriers to the community reaching the health facility and for the small number of APEs to achieve good coverage of care. The “buzz” described previously to provide the second stage of sensitisation and resulting in a multiplier effect on demand, as seen in Burkina Faso, was not achieved. Instead the process appeared to remain dependent on the more resource intensive one on one sensitisation which may be, in part, mitigated by targeting particular members of the community who are likely to access and spread the health promotional message. It was less possible to comment on the impacts of this effect in Kenya and Malawi either due to lack of implementation of the interventions or because it was not captured in the data.

D. Motivation by accountabilities - Health Facility Workers

Health facility workers are constrained by many factors including weaknesses in the health system across each country such as lack of basic and on-going training, human resource limitations and lack of material resources within the health facilities such as drugs, equipment and transport. They are also constrained by the way in which the various power dynamics, norms and values of the system operate where fixed hierarchies are valued more highly (Franco *et al.*, 2002) than the flat structures increasingly seen in industrialised societies. This creates a lack of decision-making autonomy for healthcare workers and a way of working to strictly defined roles that do not overlap. Health system reforms including decentralisation have paved the way for hospitals to potentially become more organisationally autonomous but, this was not seen at the level of the health facility within all four of our countries.

Factors associated with healthcare worker motivation have been studied widely (Franco *et al.*, 2002, Mangham & Hanson, 2009; Mbindyo *et al.*, 2009) and include recognition of performance, acquiring responsibility and growth. However innovation and initiative-taking amongst health workers are often not rewarded. Performance of healthcare workers and the organisation over all is judged and rewarded by activity, rather than health system responsiveness or health outcomes. There is a fear at all levels of being judged negatively and of sanctions (Rowe *et al.*, 2005) that overrides the self-efficacy that has the potential to be gained through training, coaching support or supervision (Franco *et al.*, 2002). For example in Mozambique there was a lack of motivation to send women to the referral facility when needed since the health workers feared that this would signal a deficiency in their skills. Training and supervision interventions, often judged positively by staff (Tavrow *et al.*, 2002) but variable in quality - did not appear to be sufficient themselves to drive motivation to provide better quality postpartum care. In the countries where there were pre-existing or other programmes that were introduced that created accountability systems for delivering postpartum care, HFWs were more motivated to increase their activity and vice versa, and MOMI interventions that supported increases in activity were synergistic. However, in Malawi for example health worker motivation was low since there was a lack of accountability for providing high quality care. We can show that postpartum care visits in Burkina Faso were increased as a result of introducing the MOMI interventions but that this change was augmented by the introduction of the P4P initiative for which PPC and PPFP were key indicators. Despite being able to demonstrate this increase in activity, it is not clear that this also resulted in improved quality or indeed if quality declined. Without tying quality indicators into routine reporting structures and therefore developing accountability for quality, it is hard to achieve improvements in quality or indeed to measure them for an intervention that involves working within the existing constraints.

E. Together is Stronger

Integration of services was planned in three out of four of the sites in order to utilise the infant vaccination visit for opportunistic maternal care and family planning. In this context integration was considered to combine provision of immunisation services to the infant with postpartum care of the mother, at the point of delivery. The aim was to deliver these service functions in one setting reducing fragmentation of the patient journey and potentially enhancing the number of services that the women were able to access. In practice the integration elements of the interventions may have been poorly conceptualised

at the outset and consequently the planning and execution of the integration of services did not involve the structural and organisational reconfigurations that were needed. This limited the extent to which integrated delivery could really be provided since the services are traditionally provided through different systems, financing arrangements and in physically different places. Studies of the effectiveness of integrating services in LMIC settings are limited. A Cochrane review did not demonstrate improved user experience as a result of integration either (Briggs & Garner, 2006). Integrating with an immunisation programme that is already robust with good coverage is likely to maximise the impact of family planning, for example (Wallace *et al.*, 2009). In our evaluation we were not able to study in more depth the contexts within which integration worked better or less well except to develop theory about the relationship between size, complexity and level of resources the health facilities had – small, medium and larger facilities – and their prospects for delivering integrated care in the climate of limited resources. In general it was found that where integration had been attempted, the staff in the better resourced health facilities were observed to have more clearly defined professional roles with little overlap between maternal and infant healthcare and therefore the combined provision of the services was less easily achieved. In a smaller facility individual HFWs were often co-located, knew about each other's roles and expected to perform overlapping functions to account for absences. The opportunity for maternal care created by infant vaccination was therefore perceived and performed more intuitively by HFWs in smaller rather than larger facilities.

7.2 Limitations of the evaluation

The aim of the study was to strengthen health systems and integrated postpartum healthcare delivery by conducting health systems research in the selected sites in 4 sub-Saharan African countries. The investigation was to measure the impact of the interventions as well as the determinants of effective and sustainable improvements at scale.

A number of risks to implementation were identified through the early work packages. The first was that the benefits of improved postpartum care might not be demonstrable because of poor or inadequate implementation of the package of services. Secondly, the lack of a control site for measuring impact may reduce the validity of findings and the attribution of any measured improvement in health outcome to improved postpartum services. Further there may be difficulties with sustaining communication and linkages

between facility and community health workers. Consequences of this threat would be particularly notable around the time of childbirth, where effective communication between facility workers and CHWs would be necessary to ensure that CHWs are aware of which women require home visits shortly after childbirth. The availability of a well-functioning and sustainable CHW programme at the research sites would be a pre-condition to have successful community-based postpartum services as the approach of this research projects is to work with existing health structures and services. If the capacity of CHWs in the study sites is weak, this would markedly hamper project implementation and evaluation.

The actual interventions were only implemented over periods between approximately 12 and 24 months limiting the availability of empirical data to measure impact. The impact evaluation was reliant on the monitoring data (Kouanda, 2013) being generated by each of the project sites. Variations in the quality and content of data being collected is a major limitation for the cross-comparison of the intervention across the sites. In Burkina Faso, where MOMI project was supported by a well-established research site, the quality of data collected was relatively better than other sites. In contrast, in Malawi, MOMI project was not built on an existing research project and monitoring data was not consistently or accurately collected. A lot of preparatory work had gone into establishing the MOMI project in Ntchisi district. In Mozambique, remote management and supervision from Maputo for the project in Chiúta district, was a determining factor and there were also significant gaps in the quantitative data. As each site was monitoring their own context specific set of interventions the common variables across the project sites were limited. Additionally, reporting of the data by HFWs was dependent on their motivation and contextual factors at the HF level (e.g. high workload, leadership).

Using a theory based evaluation approach to evaluate programme determinants and their mechanisms, the study envisaged a research strategy which included a combination of qualitative and quantitative data consisting of case studies, observations, focus group discussions, interviews, daily diaries, event logs, network analysis and a range of surveys at baseline, mid-term and end-line as well as routine monitoring data. These datasets individually and in combination were to be used in the theory based evaluation of the program in order to triangulate the data.

There were practical and logistical challenges in using daily diaries and event logs as research tools. The pilot phase of the project showed that staff was unable to complete the diaries daily citing workload in their facilities. In places where diaries were completed, they lacked detail to capture the day to day functioning of the health facilities. This data tool was not rolled out in the implementation period. Maintenance of event logs provides a detailed history of the local context in which the intervention is being implemented, over the length of the project. This when annotated against the run charts of key process indicators gives an indication of how the intervention could have potentially contributed to improvements in postpartum care. There were logistical challenges in implementing the event logs. The event logs were maintained in the health facilities and were written in the local language. There was no system in place to ensure that the event logs were transported to a central repository in the project office. Where event logs were collated, transcribing them on to a computer was a time-consuming process and there was not enough manpower available within the project to do that. There was also no consistency in the reporting of events. This was probably due to a lack of proper training on the use of the tool.

Short intense periods of data collection were often more effective than those requiring sustained inputs such as the monitoring data, event logs and diaries. The bulk of the data for the evaluation therefore eventually came from the baseline survey and case studies that were conducted towards the end of the project.

Limitations from the baseline and interim survey

The tools used for data collection were very comprehensive and data collection included a wide range of different sources. The time and effort required to gather and analyse this data was much more than was originally anticipated. This in turn had implications for initiating the intervention implementation.

Limitations with the implementation strength

The choice of domains such as the dose, duration, intensity, specificity and fidelity of the interventions is based on evidence from available literature on the topic. Intervention components such as quality, human resource, timeliness have also been considered as part of implementation strength but was not included in the MOMI study. There are also no well-established definitions for the chosen domains. The definitions used in this evaluation are based on researcher experience and have not been validated. While we evaluated the

implementation strength for all interventions, this could also have been done for each of the interventions (immediate postpartum care, integration of care, community postpartum care) individually.

Another limitation is the choice of appropriate weights to be applied to the different domains. In this study, all the domains carry equal weights (e.g.: dose and specificity). Also some domains such as intervention dose are relatively much easier to measure as compared to others such as intervention specificity (conceptual clarity).

Since the scores are subjective, the validity of a cross-country comparison is debatable. For instance, a low 'dose' might be adequate for an intervention being influenced by other contextual factors, for instance if its organisational 'maturity' to gain from the low dose is high.

Limitations with the case studies and realist evaluation

The first set of limitations regarding the case studies is linked to the participants. Women, as described in the results of all countries, are not empowered at home, in the community and at the health facility. This lack of empowerment meant that it was difficult for some women to answer freely some of the questions (e.g. around family planning themes, decision-making dynamics). This was particularly the case for women living in remote rural communities. Some difficulties also arose, for example in Mozambique, with some HFWs interviewed who refused to be recorded for fear of being reported to their supervisors. Furthermore, in all countries, HFWs are not empowered to question leadership and hierarchy and most were reluctant to do so during interviews, limiting our ability to test programme theories around leadership. Moreover, in Kenya, for logistical reasons, one of the evaluation field researchers was also a clinician involved in implementation, which we believe might explain why HFWs interviewed were not as forthright as they could have been.

Regarding participant selection, some perspectives are missing. For example in Mozambique, interviews focused on APEs, in charge of implementing the community component. MOMI-trained TBAs, whose function was to support APEs in the community, were not interviewed due to time and access constraints. However, TBAs working around the health facilities were included in informal discussions and observations. Another perspective is missing: the husbands'. Indeed, a common pattern to all countries emerged whereby the husbands play a crucial role in health-seeking behaviours, especially regarding postpartum family planning.

Secondly, given the number and the complexity of activities implemented in all sites, topic guides were rich as several elements needed to be evaluated. But time constraints during interviews, set by some participants (e.g. busy HFWs or policymakers, postpartum women with chores to attend) meant that some themes of the topic guides had to be briefly discussed.

Thirdly, a certain degree of implementation is required in realist implementation to test programme theories and to draw links between CMOs. Therefore, in some sites, only a few programme theories could be tested and a fuller picture of links between CMOs – like it was achieved in Burkina Faso – could not be accomplished.

7.3 Reflections on the MOMI project

The MOMI project was innovative in many ways. It proposed the development of a package of interventions for the postpartum period, delivered through a combination of facility and community based approaches designed to integrate services and strengthen health systems.

It was also innovative in terms of the project execution as the package of interventions were not pre-determined but were developed based on the findings of the situational analysis and policy review and extensive engagement with stakeholders. MOMI thus had a facilitatory role to play in terms of intervention implementation with the assumption that stakeholders would take greater ownership of project implementation through existing health systems structures.

Engagement of stakeholders in determining the intervention package was a novel approach as it was assumed that this would lead to greater ownership of the interventions and development of a context-specific set of interventions. This process, however, was very resource intensive and took a much longer time than anticipated. Although stakeholders were to take ownership, in reality, this was not the case. The implementation of interventions was largely dependent on inputs from the MOMI team members, whose primary responsibility was research and evaluation.

Despite knowledge sharing with the stakeholders on the situational analysis and policy review, the final set of interventions were more generic in nature. The reason for this is not clear and was also not explored in case studies with key partner members. This could be

related to the issue of ownership. In a system where the culture of 'per-diems' is very prevalent i.e. people are used to being paid for attendance at meetings, the issue of stakeholder engagement needs to be viewed with a degree of uncertainty, as it is very difficult to determine the incentives behind stakeholder engagement.

Many stakeholders also failed to make the distinction between MOMI as a health systems research project and other development projects. As a result, there were unrealistic expectations for MOMI to provide significant external resources for project implementation, despite having communicated clearly the purpose of the project as being to work within existing constraints.

Despite being well intentioned, the process of stakeholder engagement might not have been able to support the scaling up and organic spread of the intervention as was originally envisaged in the project. However, this might be a premature statement, since the length of the implementation of the interventions was typically only for a short duration of 12-24 months. It is difficult to determine the 'critical mass' (or length of time) required for the organic spread of the interventions.

Community interventions usually require a long intervention period and this was not taken into consideration while deciding on the community interventions. As a result in Malawi, the community action cycles were still being conducted even as the project was coming to a finish.

Interventions for integration of service delivery remained a challenge across all the project sites (except in Kenya where maternal and child service were already integrated). Integration of service delivery required significant re-organisation across the different levels of the health system and this was perhaps too ambitious an objective for MOMI's scope of work and budget, especially given the insufficient engagement of senior stakeholders mentioned above. In sites that attempted re-organisation of care, such as Mozambique, where a 'One-Stop Shop' for postpartum care was established, it was more associated with the paucity of human resources rather than as a deliberated pro-active strategy.

The 'dosage' and 'intensity' of the intervention was also sporadic and varied in consistency across the different sites. Poor or inadequate implementation of intervention packages was anticipated as a risk in the initial project proposal and working with established research sites was suggested as a solution to improve project implementation. In

sites such as Burkina, where the research sites were well-established even before the start of the MOMI project, a greater degree of consistency in the execution of the intervention was evident. This is confirmed for example by the statements from AVs and HFWs in Burkina Faso, who said that they were regularly supervised by the MOMI team.

Sites such as Malawi had a devolved process for project implementation and relied heavily on the existing health system structures to deliver the intervention. Health facility staff had other competing priorities and this led to significant delays in implementation of MOMI interventions.

At a project level, communication and engagement between the MOMI consortium partners remained adequate and consistent. The team met annually face-to-face followed by quarterly teleconference calls to discuss project updates. Within the in-country teams, there was a constant turnover of staff and this affected project implementation. Engagement of the district implementation teams in each study site varied and was greatly dependent on the participation of the MOMI in-country project team.

The quantitative evaluation was limited at the outset by the fact that MOMI was not a trial and the resources available for the project and its evaluation also precluded the possibility of collecting sufficient population-level data on mortality or other 'hard' outcomes. Instead the quantitative evaluation was to rely on the monitoring data and analytical methods appropriate for observational data. DAG causal inference modelling was originally envisaged to attempt to causally associate the MOMI interventions (appropriately parameterised) with the process and output measures captured by the monitoring data. However, the lack of completeness and quality of the available monitoring data, along with insufficient leads from initial visual plausibility analyses of timeline data, led to such efforts being considered superfluous. Instead the basic visual analysis of the monitoring data timelines was used to supplement, corroborate (or refute) findings from the qualitative realist analysis of the end-line case studies. The case studies were considered the main evaluation method, and confirmed as such at the last Scientific Advisory Board review meeting in Porto in March 2015.

The level and approach to analysis was fairly innovative and new for the research team as well. In retrospect, the data collection methods and tools could have been more concise to only reflect the information that we relied on for evaluation purposes, as depth of the

qualitative data was dependent of the in-country field researchers capabilities and understanding of the activities implemented and programme theories.

Measurements of implementation strength could have been done at various time points to observe variations during the course of the project. We had introduced tools such as event logs and personal diaries so as to gather some rich data on the intervention transition that was envisaged. However, staff capacity within facilities and a mix of language skills limited the use of the tools for evaluation purposes. Implementation strength could have also been measured in terms of each of the individual interventions at the community and facility level.

Finally, instances where programme theories are well articulated and trigger mechanisms identified, learnings from such projects would explain the pathways to scale-up of interventions and provide opportunities for evaluation. Where programme theories are unable to explain the mechanisms but the intervention outcomes have been positive, here there is a need to consider alternate programme theories for explanation. Where programme theories are able to articulate intervention mechanisms but the outcomes are not clear or are negative, there is a need to review the choice of indicators used to define the outcomes. Finally where programme theories are ambiguous of the mechanisms that trigger the intervention and the intervention outcomes also negative, a review of the implementation strength of the intervention can provide insights into why the intervention did not work (see Table 11).

		Programme Thories	
		Mechanisms identified	Mechanisms not identified
Intervention Outcomes	+	Opportunities to scale	Consider alternate Programme Theories
	-	Review choice of indicators used to define outcomes	Review implementation strength

Table 11 – Relationship between intervention outcomes and programme theories

Chapter 8 – Cross-Country Analysis of Critical Determinants of Sustainability and Replicability of Postpartum Care (WP7)

8.1 Framework for Analysis

The MOMI project has since inception defined in its approach that the selected interventions for each site should be context-specific, agreed on, build on evidence-based knowledge, sustainable and liable to be scaled up. According to this, the implementation of MOMI interventions sought the involvement of the key stakeholders throughout the project implementation. The interventions were designed to be cost-neutral and in line with national policies so that at the end of MOMI implementation there should not be barriers to the continuation of what has been achieved.

We will further provide a review of the conceptualization of sustainability and replicability.

8.1.1 Sustainability

Sustainability is a recent and not consensual or a straightforward concept, despite the attempts to clarify definitions and propose models for the exploration and operationalization of sustainability of health programs or interventions (Shediac-Rizkallah & Bone, 1998; Sarriot *et al.*, 2004; Swerissen & Crisp, 2004).

In the literature, sustainability is associated with the idea of a long-term health program or intervention “continuation”, and the interchangeable use of different terms to define this concept is common. In a systematic review, published in 2012, only 35% of the 125 studies examined actually defined sustainability, and among these, different terms were used (Stirman *et al.*, 2012). Many of the terms used, like “maintenance”, “institutionalisation”, “incorporation”, “integration”, “routinisation”, “community ownership” or “capacity building”, are not entirely synonymous and instead represent the multiple perspectives of the concept (Shediac-Rizkallah & Bone 1998; Gruen *et al.*, 2008; Stirman *et al.*, 2012).

The definitions of sustainability of health programs first presented in the literature were very much focused on the “institutionalization” of the health programs within an organization or structure (Bossert, 1990). Subsequently, these were more related to the variety of forms for maintaining health benefits to a population (Shediac-Rizkallah & Bone 1998; Sarriot *et al.*, 2004). In its simplest form, sustainability is described as the “capability of being maintained at a certain rate or level” (Gruen *et al.*, 2008).

The diversity of definitions partly results from the different targets for sustainability and of what one is actually seeking to be sustained (Shediac-Rizkallah & Bone 1998, Swerissen & Crisp 2004). The sustainability in distinct programs, practices and interventions namely community-level prevention, medical practice, quality improvement, are drivers for the variety of perspectives and consequently of the different types of assessment (Stirman *et al.*, 2012). Despite the diversity of definitions, for this study a conceptual framework was developed synthesizing the three main perspectives of sustainability: 1) maintaining health benefits achieved through the initial program; 2) continuation of the program activities within an organizational structure; and, 3) building the capacity in the recipient community (Shediac-Rizkallah & Bone 1998). This model has been widely accepted, and adapted by many authors in this field leading to a multidimensional concept, proposed by WHO (see Box A) (St Leger, 2005; Gruen *et al.*, 2008; Stirman *et al.*, 2012).

Box A: Definitions on health program sustainability.

Definitions

- Maintenance of health benefits
- Continuation of a health program
- Institutionalization of programs within organizational systems
- Community capacity

Multidimensional concept

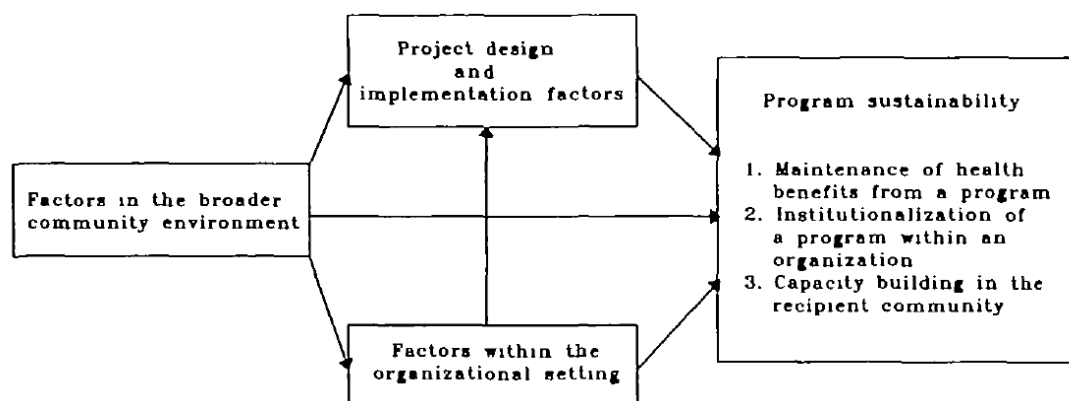
“The ability of a project to function effectively, for the foreseeable future, with high treatment coverage, integrated into available health care services, with strong community ownership mobilised by the community and government.” WHO, 2004

Adapted from: Gruen, et al, Sustainability science: an integrated approach for health-programme planning. 2008

The multidimensional concept implies not only the “continuation process” but also the diversity of forms that this process may take and at what levels it operates (Shediac-Rizkallah & Bone, 1998; Gruen *et al.*, 2008). This means that, for example an intervention may be entirely or partly continued, or parts of the intervention may be institutionalized as individual components (Shediac-Rizkallah & Bone 1998; Swerissen & Crisp 2004). An example of this is the results from a study in Malawi, about male involvement in maternal health care, where facility-based interventions were not sustainable at all whereas community mobilization was sustainable in rural settings (Kululunga *et al.*, 2011).

The development of conceptual frameworks has also involved the exploration of factors that can affect sustainability. The identification and recognition of these factors is an important step as it allows the understanding of the conditions under which programs are most likely to continue, and, consequently the active modification of the conditions to maximize long-term sustainability (Shediac-Rizkallah & Bone, 1998). These can be broadly grouped in three categories as presented in Figure 46. These are: 1) program or intervention design and implementation factors (including staff, financial resources, implementation activities and timeframe of the project); 2) organizational setting (related to organizational and managerial structures and processes including institutional strength, integration capacity of the program and leadership); and 3) broader community environment (including political, economic and social aspects and community participation) (Shediac-Rizkallah and Bone 1998).

Figure 46 – Conceptual Framework proposed by Shediac-Rizkallah & Bone, 1998

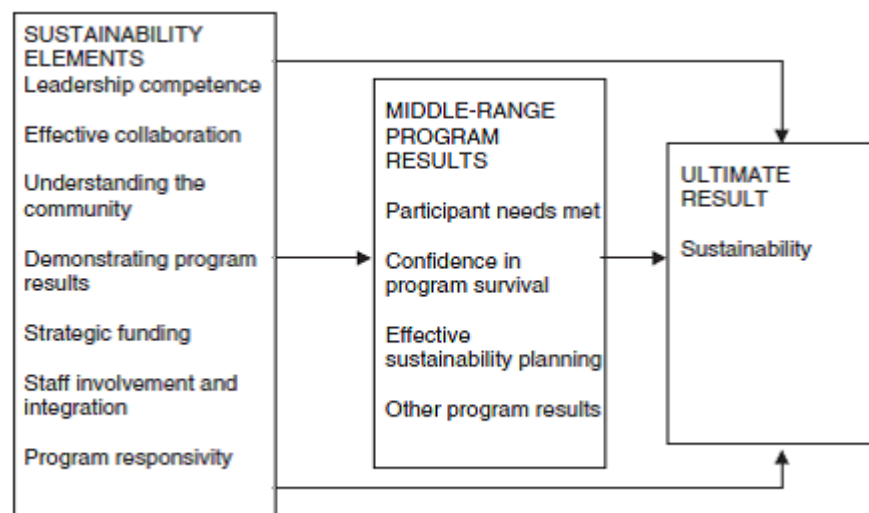


Source: Shediac-Rizkallah MC, Bone LR. Planning for the sustainability of community-based health programs: conceptual frameworks and future directions for research, practice and policy.1998

In 2004, Mancini and Marek, proposed another conceptual framework and a measurement tool of sustainability for community-based programs for families. Their theoretical framework was based on three dimensions as shown in Figure 47. It presents seven major elements that are associated with sustainability and will lead to the desired middle-ranged program results, increasing the likelihood of sustainability, the final dimension of the framework. In this context a multifactor tool - Program Sustainability Index (PSI) - was developed and used to assess the elements influencing sustainability. The PSI comprises 53 items distributed between the seven major elements mentioned before. The overall conclusions of this study showed that only 29 items were relevant for the model and

that among the seven elements, leadership, funding and staffing are the basis for a program success (Mancini & Marek 2004). Moreover, it provided insights about the interrelationships among these elements. However, the PSI still needs to be further developed and tested and therefore it is recommended in future research the use of the complete tool.

Figure 47 – Conceptual Framework proposed by Mancine & Marek, 2004



Source: Mancini JA, Marek LI. Sustaining community-based programs for families: conceptualization and measurement. 2004

WHO, on the *Guidelines and Instruments for conducting an evaluation of the sustainability of CDTI projects*, points out a set of factors that can influence sustainability. These factors are coincident with the ones already mentioned in previous frameworks, but some terminology differences may be found. They consist of:

- **Integration/incorporation:** Projects which have become incorporated into the routine running of the health care services are more likely to be sustainable.
- **Resources:** Projects are more likely to be sustainable if they have enough resources (human, material, financial) to support what they are trying to do.
- **Efficiency:** Projects that are run cost-effectively are more likely to be sustainable.
- **Simplicity:** Projects that use simple, uncomplicated routines and procedures are more likely to be sustainable.

- **Health staff acceptance (Attitude of the health staff):** Projects are more likely to be sustainable if health staff accepts the intervention as a routine activity, which they will continue to do even in the absence of additional material reward.
- **Community ownership:** Projects are more likely to be sustained if the communities where the intervention takes place support it wholeheartedly, and are willing to take responsibility for it.
- **Effectiveness:** Projects that are functioning effectively are more likely to be sustainable.

It is important to highlight that the assessment of sustainability requires the operationalization of sustainability concepts which requires selection of a group of measurable indicators that assess the degree in which the intervention is capable of being sustained (Shediac-Rizkallah & Bone 1998).

In summary, sustainability is a multidimensional concept inserted in a dynamic system where factors and components interact and therefore, it must be studied as a distinct and dynamic phenomenon (Gruen *et al.*, 2008, Stirman *et al.*, 2012). The definition of sustainability and then the identification of the indicators that can inform the degree of sustainment for each dimension are the essential steps in the process. Thus, multifaceted and multilevel approaches are required.

Based on the previous literature review, a set of factors were identified and selected for WP7 research. These factors are summarized in Box B and are presented in more detail in the Data analysis section.

Box B: Summary of the factors affecting sustainability

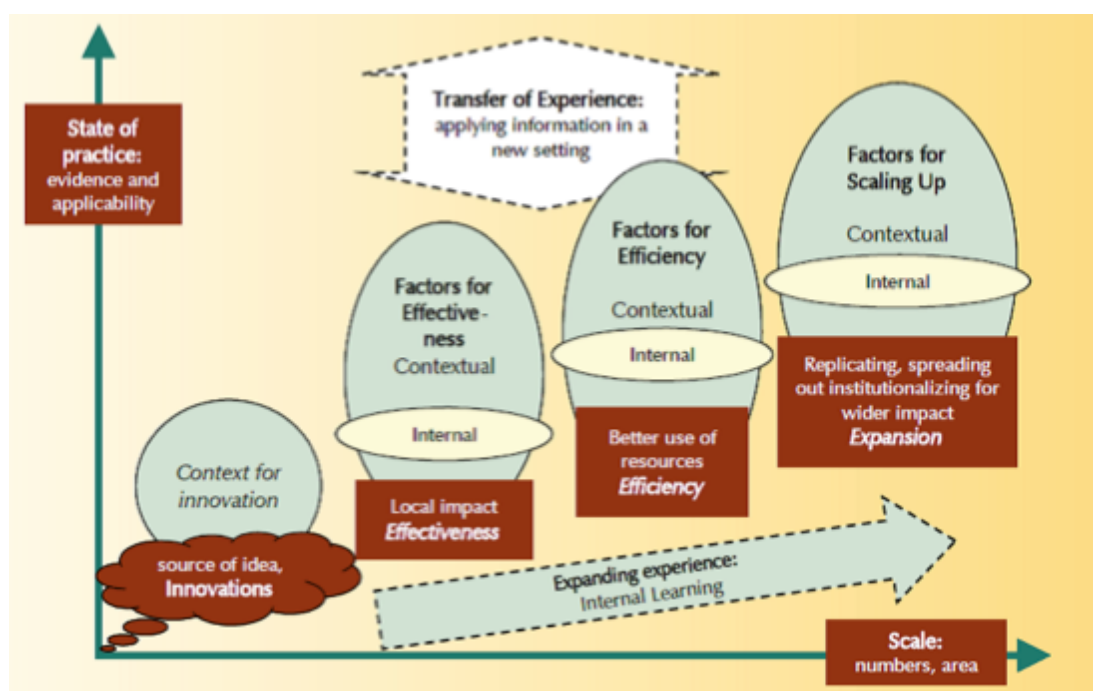
- Simplicity
- Implementation duration
- Leadership
- Effective collaboration (from stakeholders)
- Understanding the community and context
- Staff involvement
- Intervention responsiveness
- Resources and funding
- Demonstrating results
- Community ownership
- Inclusion of the intervention in the package of services provided
- Perceived benefits
- Commitment

8.1.2 Replicability

Replicability is defined as duplication or reproduction of the core components of a program or intervention (Metz *et al.*, 2007). In the literature, the terms “scaling up” or “expansion”, although not exactly equivalent, are more usually observed to refer the idea of replicability or replication. In fact, replicability is a specific type of “scaling up”, also named as “horizontal scaling up”. Scale up is defined as “deliberate efforts to increase the impact of successfully tested health innovations so as to benefit more people and to foster policy and program development on a lasting basis” (WHO, 2010). Replication is part of the scaling up process as it includes only the reproduction of the intervention’s core components in different geographic sites or its extension to serve a larger or a different population group.

The replication of an intervention as well as the scaling up process, should start from the proven effectiveness of a program or intervention (Cooley & Kohl, 2006), followed by the demonstration that it can be successfully implemented in new locations, obtaining the same outcomes (Figure 48) (Metz *et al.*, 2007).

Figure 48 – Overview of issues for analysing scaling-up



Source: Cooley L, Kohl R. Scaling up - From the vision to large scale change - A management framework for practitioners. 2006, Adapted from Jim Hacock, World Bank Consultant

Underlying to replicability are two concepts: 1) the core components; and 2) the contextual elements. The core components are the most essential and indispensable elements for the success of an intervention independently of the setting. These can be organized in two groups: the core intervention components and the core implementation components. While the core intervention components comprise aspects such as program philosophy, program or intervention structure, direct treatment and services, the core implementation components include the program or intervention costs, staff selection criteria, staff training, staff supervision, administrative structures and systems-level activities. The process of determining the components of an intervention is called component analysis and involves the assessment of individual intervention components to determine the extent to which each of them is really essential for the success of the intervention (Keith *et al.*, 2010). The contextual elements are the ones that give the settings their particularities. Also, they determine the required degree of adaptation of the interventions so they can be implemented in a different setting. The fitting and adjustment to the new settings increases potential feasibility and sustainability of the intervention. However, the literature highlights the fact that there can be tension between the need to stick to the original plan (fidelity) of the intervention and the need for and degree of adaptation required. The course of an intervention's implementation is therefore an important factor and the core components of the intervention assume a central role in the replication process.

A more recent framework for the scaling up of global health interventions, developed by Yamey in 2011, also identified, among five key contributors to success, the role of staff and the importance of community support. These factors were mainly identified from interviews with implementation experts and also from the published literature. The other four key contributors to success were: choosing a simple intervention widely agreed to be valuable, strong leadership and governance, tailoring the scale-up approach to the local situation, and, incorporating research into implementation (Yamey, 2011; Nair *et al.*, 2012).

In summary a successful replication process requires detailed knowledge of the core components of the intervention that are essential to produce the expected outcomes, and detailed knowledge of the right balance between the implementation of these and necessary adaptations to the new settings (Kilbourne *et al.*, 2007). In this sense, the whole process of implementation of the interventions, including the description of all activities, the identification of direct and indirect actors and their involvement in the process, are major aspects to be considered for replicability.

From the literature review, we selected five factors that we considered to be the most important for the replicability of a health intervention. These factors are summarised in Box C and presented in more detail in the data analysis section.

Box C: Summary of the main factors influencing replicability

- Identification of the core components
- Adaptation
- Attending to process
- Community support
- Role of the staff
- Effectiveness

8.1.3 WP7 Research questions and objectives of the study

The overall objective of the WP7 was ‘to improve health system knowledge by cross-country analysis of critical determinants and barriers to sustainability and replicability of interventions to improve postpartum services and outcomes at the research study sites’.

The specific objectives were:

- To assess the factors associated with the sustainability and replicability of intervention;
- To provide lessons learned and recommendations on factors related with sustainability and replicability of the intervention.

8.2 Data analysis

The assessment of the factors associated with the sustainability and replicability of the interventions was based on the factors previously mentioned. Data were analysed for content and coded into one or more, as appropriate, factors associated with the sustainability and replicability that constituted our predefined themes (explained in more detail below). When applicable data was also coded with realist terms (detailed in chapter 2). No new themes have emerged from our data analysis. We intended to, simultaneously, draw programme theories related to sustainability and replicability, however to test them we would need to have a certain degree of implementation which was found not to be enough. Data were analysed using NVivo 11 qualitative analysis software. All sources of qualitative data were analysed according to these codes by the UCL and FMUP evaluation

teams and memos recording emerging themes were shared between the evaluation team. Findings were discussed and triangulated in weekly Skype meetings with UCL and FMUP.

In order to have a more comprehensive approach to the factors facilitating and hindering sustainability and replicability of the MOMI interventions in each African country, we asked to the team leaders and coordinators of implementation what were their plans in terms of exit strategies. The following questions were sent and answered by email:

1. What are your plans/strategies for exit of MOMI project?
2. With whom have you or will you be discussing your exit strategies?
3. What are your expectations regarding the plans put in place?

Additionally, the research teams in-country who collected the data were consulted to provide clarifications and to validate interpretations.

Regarding sustainability the following themes were selected:

- **Simplicity**

The simpler the intervention is, the easier it is for staff to implement it with fidelity and achieve consistent results. The more an intervention or program stays close to existing practices, the higher the chance of the intervention being adopted and its effectiveness sustained.

- **Implementation duration**

This concerns the duration of intervention implementation. The greater the number of years the program is in operation, the greater the odds of its continuity. Thus, short-term interventions, with less than 2 years, tend to be less successful as “institutionalization” at an early stage is difficult, and programs lasting up to 5 years tend to have increased odds of “institutionalization”(Shediac-Rizkallah & Bone, 1998).

- **Leadership**

The leadership is an important factor for an intervention to survive. It guarantees endorsement and support. Competent local leadership involves the development and follow-up of a plan that can lead to the success and continuity of the intervention through the clear establishment of a mission and objectives, regular needs assessments, on-going

planning and adaptation, evaluation, support and supervision of staff and provision of staff training.

Key factors to be considered: leader's engagement with the intervention mission and objectives, leaders' commitment, leadership competence, close collaboration with all the involved partners, promotion of initiatives, motivation of the partners and assurance of program quality.

- **Effective collaboration (from stakeholders)**

Effective collaboration begins with the identification of relevant stakeholders, such as local decision-makers, health services and health workers, community leaders and community structures who are able to actively support the intervention goals and who have clearly defined responsibilities; Organizational collaboration is usually more successful as the collaborative efforts build a broader base of support of key stakeholders for program implementation in the community.

Key aspects to be considered: stakeholders support, stakeholders engagement and involvement in specific tasks and responsibilities, relationship building and shared vision among stakeholders, program incorporation of the existing policies, institutions or services ("institutionalization") and institutional capacity and strength.

- **Understanding the community**

Community understanding is based on knowledge of the community context including knowledge of community needs, resources, culture and members. This knowledge allows the creation of connections between individuals and organizational structures and therefore enables the strengthening of community commitment.

Key aspects to be considered: socioeconomic and political context, community needs and resources, structure and organizational aspects, program or intervention fitting (adjustability), community participation, community values and cultural factors, community diversity, key community leaders support, local activists and local structures involvement (CHW, TBA, peer groups, etc.).

- **Staff involvement**

Staff involvement must favour the inclusion of committed, qualified staff in implementation, evaluation and decision-making. When staff are considered an important component of the

organization and when they perceive the organization as their own, program goals are more easily attained.

Key aspects to be considered: staff commitment, training and education on relevant issues, competent performance levels, staff recognition and compensation, hiring staff from the community the program serves.

- **Resources and funding**

Resources and funding factors are based on the availability of strategic plans to support the current and future needs of the program or intervention. Strategic funding is crucial for program or intervention continuity and the diversity of funding sources increases the odds of having the necessary funding and resources for short and long-term program requirements. Use of -and adaptation of interventions to- the resources available in the communities served by the intervention is also likely to increase sustainability.

Key aspects to be considered: assessment of short and long-term funding and resource needs, identify and develop a range of financial options, consider different sources of funding and resources support. In the case of MOMI, guarantee that general funding of the institution and the activities is secured so that interventions can be designed and followed accordingly.

- **Intervention responsiveness**

Program responsiveness is the capacity of an intervention to adapt to community-specific needs and to the change of those needs. Activities and priorities may need adjustment to overcome context particularities and changes, as the goals and objectives of interventions are maintained. Successful and sustained interventions are flexible, i.e. are modifiable, and not static. However, it is also important to take into account the degree in which the interventions are modifiable in order to continually respond to the community or organization changing or different needs –fidelity to the core components of the intervention is essential to achieve the expected outcomes.

Key aspects to be considered: Intervention adaptability and flexibility; Intervention fidelity; Balance between adaptability and fidelity – keeping the goals and objectives.

- **Demonstrating results**

Demonstration of the results of the intervention is achieved through well-established research methods including a report of the results to stakeholders and involved partners. The evaluation should be focused on measurable results and should consider modifications made throughout the implementation process. Interventions that generate important symbolic or reputational benefits are more likely to be sustained and adopted by others.

Key aspects to be considered: impact, effects at different levels, effectiveness and feedback.

- **Community ownership**

Communities where the intervention takes place support it wholeheartedly, and are willing to take responsibility for it.

Key aspects to be considered: community involvement, participation and sense of responsibility.

- **Including the intervention in the package of services provided**

Interventions that become part of the routine of the health services at facility and community level are more likely to be continued.

Key aspects to be considered: “routinization” of the interventions of specific activities

- **Perceived Benefits**

When community members or the target population perceive benefits that are beyond health care and health gains, they are more likely to embrace the intervention and take responsibility for it.

Key aspects to be considered: benefits beyond health sphere perceived and valued by the target population and served community.

- **Commitment**

Commitment to health interventions can grow over time not only at community level but also at leadership and decision-making levels. Increased trust of the intervention may be a result of visible benefits and positive effects of the interventions – when the community’s needs are actually being met by the intervention they are more likely to trust it and buy into it. Mid-term trust increases the odds of sustainment of interventions over time.

Key aspects to be considered: commitment built on the results of the interventions.

Regarding the replicability the following factors were selected:

- **Identification of the core components**

It is essential to identify the core components critical to achieve the desired outcomes. The challenges rely in defining what a component is and which ones are essential, and therefore, conducting component analysis is an important step. Broadly, core components can be organized in two groups: intervention components and implementation components. Providing clear information and characteristics of the components can help to better identify the ones that are essential for the effectiveness of the intervention. This information can include: guidelines and strategies for the incorporation of the intervention in a service or in an on-going program; service delivery model and activities such as structure, service duration, setting, staff skills, protocols; and, aspects that promote consistency in service delivery across staff.

Key aspects to be considered: Clear definition of components; Assess essential components through effectiveness analysis (which components are crucial to the intervention's effectiveness); Provide detailed information on each intervention regarding its components and the process of implementation. Provide adequate information for component analysis.

- **Adaptation vs. Fidelity**

Adaptation, as a modification or a change in interventions' design and content, is expected in a replication process in response to context. It can also be motivated by a shift in priorities, by the availability of resources and the need to adapt the process of implementation. On the other hand, fidelity (defined as a combination of adherence to a prescribed set of procedures, at adequate dose or intensity, competence in delivery and differentiation of other interventions) to the original core components of the intervention is required to assure the achievement of specific health benefits. Thus, tailored modification can be made while remaining faithful to the identified core elements, facilitating the desired health benefits. The balance between adaptation and fidelity is very important in replication so that expected outcomes and effects are attained.

Interventions or programs can suffer modifications and changes at several points and levels:

- 1) Pre-implementation (e.g. protocol design, activities definition and selection)

- 2) Content (e.g. updating the information based on recent evidence)
- 3) At particular sets (e.g. introducing different options for the same intervention or activities)
- 4) Unanticipated issues (e.g. response to implementation and progress, unforeseen aspects)

Key aspects to be considered: Clarity (regarding fidelity of an intervention and the adaptation process); adaptation and fidelity to the interventions' implementation are essential.

- **Attending to process**

It is essential to attend to process by putting in place monitoring procedures as the intervention's content and its implementation evolves. This allows, on one hand, to know if the intervention is being operated with fidelity and on the other to register deviations from the protocol or content of the intervention. Ultimately, this process can contribute to determining the key components of the interventions.

Key aspects to be considered: Registration of the nature and types of modifications, of the process by which such modifications occur and of the implementation of the changed intervention.

- **Community support**

Obtaining local support for an intervention is crucial to successful implementation, even when the intention is to replicate an intervention proven to be effective. It is important to assure that the intervention is culturally sensitive and adapted to its particularities. It is important to understand the perception of the community of the issues included in the intervention, if the intervention is a priority for community, if the community is open to it and if it is willing to receive advice or care from "outside experts". One major constraint is the sense that interventions have been designed "by outsiders for outsiders". Thus, it is important to work closely with the communities when replication of an intervention is the intention.

Key aspects to be considered: Community perceives the intervention as relevant and appropriate and accepts the methods or procedures involved.

- **Role of the staff**

Clear protocols and specific training are important steps to manage and minimize the effect of individual variability and support the fidelity of the intervention. Additionally, the staff must have a voice in the design and implementation of the original intervention and contribute towards any adaptation or dropping of components. In a replication process staff members are often discouraged to adapt or drop intervention components locally. Instead researchers or the intervention coordinators modify the components or elements that are poorly aligned with the target community. Despite this being a valuable method of reducing variability, the low involvement of staff in the adaptation process can work negatively in their perception of the process and their commitment to it.

Key aspects to be considered: Clear protocols and specific training; Promote staff involvement and commitment as the intervention process unfolds.

Data sources

For the aspects of sustainability and replicability we analysed the following data:

MOMI Project level
Work Package 2 report - Critical review of Maternal, Newborn and Child Health Policies in the four study countries (January 2013)
Work Package 3 report - Detailed situation analysis of Maternal, Newborn and Child Health Services and Care at the four study sites (February 2013)
Work Package 4 report - Design optimum package of postpartum interventions and services tailored to conditions at each site - Selected Package of Interventions for Each MOMI Study Site (July 2013)
Project Management Team meeting minutes (February 2011; February 2012; March 2013; September 2014)

Burkina Faso
4 Field visit reports (October 2013; April 2014; October 2014; April 2015)
3 PAB meeting minutes (3 rd to 5 th – January 2014; July 2014; April 2015)
Health Facility Event Logs (February 2014 to June 2015)
MOMI Event Logs 1 to 32 (July 2013 to June 2015)
4 Policy Interviews
3 MOMI Interviews
Case study interviews and observations
Participatory evaluation workshop minutes (November 2015)

Kenya
3 Field visit reports (October 2013; April 2014; January 2015)
3 PAB meeting minutes (4 th to 6 th – February 2014; September 2014; February 2015)
MOMI Event Logs 1 to 97 (July 2013 to May 2015)
Health Facility Event Logs (August 2013 to July 2014)
2 Policy Interviews
4 MOMI Interviews
Case study interviews and observations
Participatory evaluation workshop minutes (September 2015)

Malawi
3 Field visit reports (October 2013; April 2014; February 2015)
2 PAB meeting minutes (4 th and 5 th – September 2013; April 2015)
MOMI Event Logs 1 to 59 (August 2013 to September 2014)
Health Facility Event Logs (November 2013)
6 Policy Interviews
3 MOMI Interviews
Case study interviews and observations
Participatory evaluation workshop minutes (September 2015)

Mozambique
3 Field visit reports (February 2014; March 2015; August 2015)
3 PAB meeting minutes (4 th to 5 th – August 2014; August 2015)
MOMI Event Logs 1 to 29 (June 2014 to June 2015)
Health Facility Event Logs (February and March 2015)
6 Policy Interviews
4 MOMI Interviews
Case study interviews and observations
Participatory evaluation workshop minutes (September 2015)

For this section of the report we used mostly country level data – field visit reports, PAB meeting minutes, Event logs, Policy and MOMI interviews and the Participatory evaluation workshop minutes, as they were expected to provide the most useful data to address our objectives. These results were confronted with the case studies results and relevant data from the case studies were added to the analysis.

8.3 WP 7 Results: Sustainability of MOMI interventions in Burkina Faso

Simplicity

Facilitators

- The interventions selected for Kaya District were perceived by HFWs and AVs to be easy to implement, since they did not differ much from their usual activities (MOMI WP6 & 7 baseline report). However, there were some barriers to the implementation as described in chapter 3 which were mostly related to the integration of services (intervention 2).

Leadership

Facilitators

- The engagement of health policy makers is fundamental. MOMI researchers agreed that the continuation of activities does not depend on the project but on the support and endorsement from the MoH.

“It’s the topic of community health as it is perceived at the MoH. I think there are decisions [how to motivate AVs and who would pay] to be made that are not.” (MOMI Researcher₃)

- During the stakeholder’s workshop, the appropriation of results by different actors at all levels (both with decision-makers and actors working on the field) was also highlighted as a key factor for the sustainability of the project. The rationale for this suggestion was not further explored during the workshop. We can however speculate that once leaders consider the activities and its results as their own it would be more likely that they would continue their support and endorsement in the future.
- The health policy makers showed that there is a political will to continue the activities and that the end of MOMI project will not have an impact on the continuation of what has already been achieved.

“On our own, I think that after the project, we can initiate scaling up to all other health facilities to enable integration of care and better management of mother-child couple.” (Policymaker₁)

Hindrances

- There is the need for a strong support and commitment from the health policy leaders in order to overcome some difficulties, namely:

- The need to have the adequate number of HFWs, especially in rural areas where they are scarcer and need to cope with the workload.
 - The need to reinforce training of PPC for new HFWs while guaranteeing that the staff turnover is minimized. There is some scepticism that PPC will be lost in the mid-term if nothing is done to reinforce PPC training frequency.
 - The supervision visits to health facilities must also be assured. There was some uncertainty about whether the district would take over. However, a recent decision from the district to be split into two areas means that the conduct of supervisions are more likely to take place.
 - The supervision visits to the AVs, at community level, must also be assured.
 - Lastly, the focus on PPC and its activities need to be prioritized and included in the District Plan of Action.
- There is a new national project named ‘130 Communes’ that started in Kaya district in 2015. This project aims to only recruit CHWs that are literate and that will be paid. There were concerns that the authorities would replace all active AVs/TBAs working with MOMI that are mostly illiterate by these people with higher levels of literacy. However, during the last field visit (January 2016) *“authorities stated that no ‘new’ CHWs will be identified/introduced if a CHW/AV/TBA is already active in the community. They will continue working with this person, even if she is illiterate, and from now on paying this person for her commitment. Only when a CHW has to be replaced or identified (because no CHW is present in the community) the newly employed CHW will have to fulfil the eligibility criteria of being literate.”*

Suggestions

- To organise a national workshop with actors from all levels of leadership. This would put the focus on PPC and allow the maintenance or improvement of PPC indicators.
“For me, it’s the most important thing to have a national workshop, because if the directives come from high up, from the central authorities, it will be easier to implement” (MOMI researcher₂)
- To invite the officer in charge for reproductive health at the district level to be the “champion of change” at district and HF levels, by showing that the intervention was successful as her/his business card.
- To invite some AVs to be MOMI champions in the community.

Effective collaboration

Facilitators

- Since its beginning, the MOMI project has pursued the involvement and support from health policy makers due to their importance in making effective changes.

“So, being the primary official of the province it was obvious [to be a PAB member] because the project when you consider it, it’s a project that seeks the involvement of public authorities in scientific research. This is to ensure that policy makers effectively take into account research activities. And that indeed, there is an impact for people at the grassroots level...” (Policymaker₂)

- The stakeholders’ understanding of the interventions and its success has been achieved through the involvement of leaders in sensitisations, training of actors, staffing or equipment, to the grant of consumable and inputs for health facilities. It was not clear which consumables and inputs were the stakeholders referring to. As mentioned before in section 3.4.5 one of the barriers to healthcare access were the costs of commodities such as gloves, speculums and family planning.
- Effective collaboration in the quarterly MOMI supervision visits which included at least one key member of the district.

“We have overall always been associated to the project quarterly supervisions. And this allowed us to actually see together the shortcomings and make recommendations. For our last integrated supervision, we visited all the 12 health facilities involved in MOMI project to see the implementation of recommendations.” (Policymaker₂)

Understanding the community

Facilitators

- Community involvement was considered fundamental to the success of MOMI by the health policy makers. As explained in detail in section 3.4, the involvement of the AVs in PPC was an innovation brought by MOMI and supported by community leaders that resulted in AVs becoming the main driver for women to attend the HF.
- Men, in particular, played an important role at community level and their involvement is seen as essential in the design and success of the activities. It was suggested, during the stakeholder’s workshop, that meetings with male community health workers should be arranged. Even if the package of activities is difficult for men to implement, they can have an impact and contribute to the success of the project by supporting the work of

the AVs in the community. Indeed, after meeting them, explaining the project and requesting their support, it was noticed that the male CHWs helped a lot in supporting some of the AVs through promoting the awareness of men on family planning and need for postpartum visits. Also, through an information meeting, the project tried to get the cooperation from male CHWs to encourage women to attend the health education sensitization sessions and, additionally, the AVs considered the inclusion of male CHWs in their sensitization activities.

“Male CHWs have a bigger impact in most communities in sensitization women to attend community health education sessions.” (Field visit report – April 2014)

“When asked about their suggestions on involving males, some AVs thought it could be possible to partner with male community health workers to discuss FP” (Field visit report - October 2014)

- The provision of non-financial incentives was important to attract the AVs. They see these incentives as a symbol of special status and recognition of their work, which increases their motivation.

“These non-financial incentives are considered by the AVs as very important because it gives them a special status and recognition of their work for MOMI. It enhances their motivation to perform well their tasks as voluntary community workers.” (Field visit report – April 2014)

“The ceremony went well, the TBA were happy to receive their bikes and HW too, as they reiterate their commitment to make every effort for the success of MOMI project.” (MOMI event log – May 2014)

Hindrances

- However, the AVs and CHWs have low levels of literacy and the activities needed to be tailored to these needs. Illiterate CHWs, faced difficulties during the performance of activities that required higher levels of capacity, for example:

“We’ve worked on ideograms while this is not what is needed currently. We have to move forward! We need people who can read and write and who have capacity and abilities to play the role they will be given. So, this is actually one of the lessons we can learn from the project. When you work with ideograms for data collection, we always get incomplete information because at some levels, those people can hardly read the ideogram, let alone filling out properly. So, this aspect is also important. In the future, our collaborators at the community level should have a level of instruction that gives them capacity and ability to fulfil their role.” (Policymaker₃)

Staff involvement

Facilitators

- As already mentioned, all the activities were done in order to get the involvement of stakeholders. The interviews with health policy makers showed that the trainings were seen as opportunities to build capacity with the HFWs and at HFs. By having more skills, the health workers are more likely to provide care according to the skills they have acquired. They were trained in PPC delivery and in integration of services so they will not forget what they were taught. The knowledge acquired through MOMI will be integrated in their practice and HFWs revealed motivation to continue.

"We participated in training those workers and trainings enabled us to build capacity in communities but also in health facilities." (Policymaker₁)

- One of the HFWs explained that they are determined to keep doing their job even if there is a lack of staff. Since PPC is now part of the HFWs minimum required activities, HFWs do not have the choice but to keep doing these activities. MOMI researchers also believed that HFWs' activities regarding MOMI (namely PPC consults and postnatal register) will not stop. In their opinion, HFWs understood that filling out the register proves that the job was done properly and that, in case of problems that might, for instance, the HFW can prove that the consult was done according to the guidelines. Furthermore, the P4P system leads to additional pressure.
- Most AVs were convinced that their MOMI activities would end in January 2016 but they have the expectation of being authorised to visit all women and keep them informed about attending the HF and keeping their PPC appointments. Hence, the expectation is that women will still attend the HF after MOMI ends.

"I: At the moment, the women we interacted with, even we don't go back to sensitise them, they know that after delivery it's an obligation to keep going to the HF to be examined.

R: Do you think if you stop working, the women won't stop going?

I: Ah, but we don't want to stop working either!" (AV₁₁, urban area)

- AVs are enthusiastic in their job and feel that women like their activities. Most of them continued their activities within the community even if they only received non-financial incentives from MOMI. All the AVs admitted that they plan to continue the activities started by MOMI since that has an impact on the wellbeing of their community. But they also fear the accusation of being freeloaders that are only interested in something when

there is a direct benefit for themselves within their community, therefore they expressed a need to maintain their credibility.

"All HFW received a MOMI overcoat as incentive (97 T-shirts in total). This is much appreciated and seen as a reward for and recognition of their work"
(Field visit – April 2014)

"The impact they experience their work has on the wellbeing of mothers and children in their community is enough a motivation for continuing their work"
(Field visit – October 2014)

- Since MOMI activities were only added to the workload of AVs who already had a role in the community before the project, MOMI team showed confidence on the sustainability of the intervention. However, it remains questionable as to whether they will continue to do their job as efficiently as during MOMI. For example, the supervision visits are the one thing that will change yet this appears to play an important role. MOMI team members have the impression that they will not stop doing their work though, or, at least, they hope that at least half will continue.

Hindrances

- PPC must be part of the integration and training of new HFWs. According to the data collected in the interviews and documents, PPC appears not be part of HFWs education/ curriculum. Hence, it is fundamental to provide PPC training during the integration of HFWs so they are able to continue with the activities.

"I remember that we had one worker who was with us who went in another health facility and it worked there. Then, she has been posted elsewhere and the rate fell down but the health facility, which received her, has improved its results... When all the workers are trained, normally the activity must be conducted, as it should. I can say that there is an insufficiency in the service organization. When one is missing, the activity stops but it shouldn't be so."
(Participatory Evaluation Workshop participant)

"Continuity of MOMI activities depends on the next wave of HFWs, if they don't find PPC important even with P4P, they can get rid of the PPC activities – those type of HFWs won't care if the woman doesn't come back for her appointments" (HFW₉, rural area)

- Based on previous experiences, some HFWs raised concerns about AVs stopping their activities at the community and showed that their motivation was encouraged by MOMI. MOMI team members also revealed some concerns about AV's work. Even if some AVs will keep doing their job, MOMI team members fear that in case the new

national community health does not address the motivation of AVs, these will be mostly lost.

Resources and funding

Facilitators

- The stakeholders present at the workshop perceived funding as a crucial element for the sustainability of the project, which seems to be achieved from donors, the State, or steering committees of different health facilities.

“There are resources to be mobilized to be able to support some aspects within the project. It’s feasible given resources mobilization I not only at the national level. But locally, with the partners of the various districts, they can effectively mobilize resources for implementation so that to better provide postpartum care or newborn care like what has been done within the project. This is possible!” (Policymaker₃)

- The lack of financial incentives at HF level should not be seen as a problem, since the continuation of activities is recognised as an improvement of their indicators.

“It is in their interest; the goal is to improve their indicators and I think there is no problem for that” (Policymaker₄)

- During the project, the MOMI team refused to implement activities that would stop after the project. This sustainable approach is the reason why no financial incentives were given to AVs. However, it was clear that during MOMI implementation that although AVs would very much appreciate some kind of financial incentives, their motivation is mainly driven by the role they can play in improving the community's well-being.

“AVs referred that they will continue their work despite they are not receiving financial incentives, which they say would be nice to receive, but the non-financial incentives and the well-being they perceive to promote are motivating them to continue.” (Field visit report - October 2014)

- There are other facilitators, such as the low price for reprinting more checklists in other facilities. Also, COGES provides gloves and booklets free of charge and women only have to pay for iron tablets.

Hindrances

- Observations during the field visits revealed that understaffing is hindering the integration of services, particularly in rural HFs.
- There is a limited district budget for trainings.

- The frequent stock outs of medical disposals that are needed to deliver PPC (for example, stock outs of Fe/Folic Acid tablets) are frequent. Therefore, women have to pay for these materials and because they know they will have to pay for them, they will not attend PPC.

Intervention responsiveness

Facilitators

- There were some changes to the interventions in response to the needs, for instance:
 - The referral procedures were adapted to work better and improve the referral system between AVs and HFs.
 - HFWs were able to adapt and not stop providing PPC when the commodities to perform a gynaecological examination were not available. This is likely to have positive impacts on women attendance to PPC for two main reasons. Firstly, women do not have to pay for the commodities. Secondly, many women experience gynaecological examination as an invasive procedure and as a violation of their integrity, and consequently avoid PPC because of this.

Demonstrating results

- Showing the impact of MOMI on maternal and infant health indicators in Kaya to stakeholders (already involved or not) is fundamental for the sustainability of the project. Hence, there is the need of good communication of these results at national level in order to show the strengths and weaknesses of the project.

“[If the MOMI team doesn’t] ‘communicate well around the results of the project, if the authorities are not aware that the project has convincing results, they won’t see the need to scale up the sustainability of the MOMI interventions.’ (MOMI researcher₁)

Community ownership

Facilitators

- The MOMI researchers believed that even if the AVs stop doing their job in the community, women would still attend the HF. They believe that women got used to go to the HF and that it would be difficult to see someone adopting a behaviour, a lifestyle, and quickly change it and go back to the old habits. They also mentioned that women see the advantages of going to the HF for them and their families, e.g. ‘since now they

are followed after giving birth and they do not get sick anymore'. The women that have changed their health seeking behaviour, by attending the HF for delivery and PPC appointments, serve as a model for the rest of the community to attend the HF. This change is not because these women received money at the HF or were forced to go there, but because they had been convinced by the AVs and would therefore attend the HF regardless. As one of the AVs mentioned:

"At the moment, the women we interacted with, even we don't go back to sensitise them, they know that after delivery it's an obligation to keep going to the HF to be examined." (AV₁₁, urban area)

- By promoting information meetings with the community leaders, the project gained their support and a positive attitude regarding MOMI.

"Overall community leaders showed a positive attitude for MOMI and this meeting was helpful to have the community leader supporting the work of the CHWs (accoucheuses villageoises - AVs)." (Field visit - April 2014)

"All AVs met felt their input in the frame of the MOMI project useful and considered their activities as useful to improve the wellbeing of mothers and children in their community" (Field visit - October 2014)

Inclusion of the intervention in the package of services provided

Facilitators

- MOMI interventions were not perceived as being new. Rather, they allowed the different players in the system to see some of the difficulties surrounding the delivery of PPC.

"Those activities are already carried out but maybe, not with a certain level of supervision as it is currently. Otherwise, postpartum care and newborn care are provided anywhere else in Burkina Faso. It's not a new intervention." (Policymaker₃)

- When the District supervisions happen, albeit with less frequency than MOMI supervisions, they also now include PPC.

Hindrances

- There was a lack of supporting material after the training. Consequently, there was nothing HFWs could rely on after the training to help the new staff.

- The frequency of non-MOMI supervision visits was another issue. Under MOMI, supervisions took place every quarter. However, district supervisions timetabled to happen quarterly, did not happen. This was explained by having too many HFs, too many different activities to conduct and lack of will.
- Lastly, there were some uncertainties on how the community-based intervention will continue, since, as indicated, the supervisions were largely handled by MOMI.

Perceived benefits

Facilitators

- Several stakeholders recognized that MOMI had positive results and due to this is likely to be sustainable. They believed that MOMI allowed highlighting some realities that may help to improve the health of the mother of the child. The implementation of the project exposed some of the inadequacies, such as home deliveries.
- There also seemed to be a general belief that women have understood the importance of PPC, so they will continue attending the HF, regardless of the continuation of community activities.

"Well, if the project stops, I think the project will leave a footprint after all as best practices are there. It's a good approach where everyone wins, including the community, health facilities, and COGES." (Policymaker₁)

Commitment

Facilitators

- AVs were waiting for financial incentives to be paid by COGES during the implementation. Despite the fact that they never got paid most AVs (65 out of 72) continued their activities.

8.4 Replicability of the MOMI interventions in Burkina Faso

Identification of the core components

The communication and sensitisation of stakeholders should be emphasised. It is important to know what activities were carried out in the district concerning PPC, learn from them, evaluate the progress and make suggestions for improvement.

“If the project can be scaled up to other districts, it would be a good thing because this will help to improve the indicators those district (...) So, this kind of project implementation is to be encouraged and advocacy conducted for other districts to possibly benefit from this intervention. This will enable to learn lessons at the local level and improve services.” (Policymaker₃)

The institutional involvement of the High Commissioner – chair of the PAB, is fundamental to scale up the activities.

“Because when there are difficulties, we can intervene, mainly when the issue is institutional. Municipalities are also under our responsibility. Given that it is an issue that also relates to health at the grassroots level, it’s sure that over time, it will be scaled up to the various municipalities and request the involvement of mayors... As an authority supervising activities in the various municipalities too, concerning institutional position, I think I am well placed to understand some issues in order to address them.” (Policymaker₂)

At the HF level, the training for nurses, midwives and even doctors needs reinforcement on PPC.

At community level, other suggestions for replicability were made based on the experience with other projects. For instance, it was suggested to divide the big villages into smaller groups led by someone in charge of women’s follow-up. Also, if there is national awareness regarding the need for PPC and AVs are accepted by the communities to conduct these activities, implementation can be replicated. However, it can be more difficult to replicate community intervention in urban settings, where AVs can find opportunities for remuneration, consequently, it is more difficult to find and retain AVs.

The selection of AVs – how and by whom - can be crucial. Women should pick the AVs by themselves so they are endorsed and supported by them. Some women did not like the attitudes of new AV and experienced them as arrogant. Therefore, women were reluctant to listen or go to the HF with her. The other point raised by HFWs about replicability is the need to have more AVs, since some villages are too big for only 1 AV.

Attending to process

Attending to process is another factor that influences replicability. Health policy makers shared ideas on how to scale up the interventions gradually:

"Anyway, there should be monitoring and evaluation of this project on the ground. National coordination should be able to closely follow that. So, if this is scaled up to the national level, it will have greater scope and impact on people." (Policymaker₂)

"For the extension, we think that it is good to proceed gradually: first for all in the whole district, next in the region and in the whole country later." (Participatory Evaluation Workshop participant)

Since two of interventions were not new to the health system, a health policy maker did not agree with the notion of "replication" but rather said that it was a matter of sharing lessons from the implementation of MOMI.

"This is not a new intervention as such but rather an intervention that is implemented in given conditions. So, when you talk of replication, this is not the right word. It's a matter of learning lessons from what has been done so as to improve. But it's not a matter of replication; postpartum care exists, newborn care exists. Now, what lessons can be learned from the implementation of the project to improve? We need to think of that aspect, otherwise there is nothing new." (Policymaker₃)

Although PPC can be regarded as similar in all settings, there are contextual such as between rural and urban settings, levels of education, and healthcare facilities. At urban locations, people have more education, HFs tend to be bigger and with more human resources compared with rural settings. We can expect, as mentioned in section 3.5, that women of higher socio-economic background are more empowered to demand for better care and urban HFs with more human resources to have less geographical barriers and better provision of care as they should have enough staff to integrate services, for instance, and conduct activities.

Another lesson to be shared is that scaling up also needs to take into consideration the amount of time HFWs spend filling out registers. There are different registers that sometimes collect the same information 4 or 5 times and this burdens the HFWs restricting the capacity of the health care workers to provide actual care to the population. So far, nothing at the national level has been done in order to lighten the register and avoid

duplications. MOMI did not introduce any new register and only used the ones that already existed, since they are the same in the entire country.

Community support

A participatory process that gets everyone to participate and perceive the problem, and the involvement of the district are key aspects for replication of interventions.

"I would like to say that the project is noble and it should be certainly scaled up" (Policymaker₂)

In order to get the involvement of the stakeholders, there is the need to make a comparative study between MOMI and non MOMI HFs, in order to prove the impact of MOMI through such indicators.

"You need to first meet the authorities of this village to explain how the project works and explain as well to the HFWs. If possible, train CHWs so they can collaborate with the project. They will help advance the work of the project." (AV₂, rural area)

Lastly, the replicability of the project had not yet been discussed at a regional level, which can delay or harm the scale-up of activities.

"Well, we have not yet discussed the subject at the regional level. No, we have not yet addressed the subject at the regional level." (Policymaker₁)

Role of staff

The role of the staff is one of the most significant factors when analysing the replicability. In order to replicate the interventions, it is fundamental that, in the words of the health policy maker:

"... people need to know and everyone has to know their role." (Policymaker₂)

"There are many projects, but each actor needs to know their specific role and you should be able to make daily or half yearly or anyway, annual evaluations of what we do on the ground." (Policymaker₂)

Another respondent explored how the involvement of HFWs in the supervision of other HFs where the project can be scaled up can be a way of motivating the HFWs.

"I think that given that workers will be trained; this will be a source of motivation. We'll have to supervise and this is a source of motivation too. And

maybe in terms of recognition, they could get certificates or something else. Quite simple things! But lasting more than incentives in cash without follow-through." (Policymaker₁)

The role of AVs must be re-boosted in villages and the national community health policy (that is currently being formulated) needs to take into consideration their motivation, how their activities are conducted and redefine their role as AVs. If these issues are clarified at the national level and the national community health policy is well formulated, AVs will be able to replicate MOMI interventions focusing PPC.

8.5 WP 7 Results: Sustainability of MOMI interventions in Kenya

Simplicity

Facilitators

- The designed interventions were clear and straightforward, particularly those at the community level.

"It [the project] was digested into something that could be easily taken up by the community members and the community health workers" (Participatory Evaluation Workshop group)

Hindrances

- However, even though the MOMI researchers perceived the interventions as being simple, the activities were considered to be complex in terms of implementation.

"I think the interventions themselves were not complex, but the activities to implement those interventions in my opinion were complex and probably needed much thought before implementation was done." (MOMI researcher₁)

Implementation duration

Hindrances

- The period of implementation was considered short by MOMI researchers and by the stakeholders at the participatory workshop. There was not enough time for the HFWs and CHWs to incorporate the interventions in order to ensure their sustainability.

"If there wasn't enough time for example to ensure all this, it might be that people are willing to implement and continue and run on with it but they are not able to because there wasn't enough time to get to learn the new information that is being given and to run with the implementation." (MOMI researcher₂)

“On the issue of implementation period we agreed that on paper the project runs from 2011 to 2015. But after going through the nitty grities we said that a good part of first year was taken up by settling down and letting people to understand what you wanted to venture to (...) in reality we have had three years for piloting, that is the language we decided to use....

I: In fact you are being so generous when you sat three years of implementation (G2 breaks into loud laughter) in my opinion I can say it was just one year, last year...) (Participatory Evaluation Workshop group)

Leadership

Facilitators

- There are already signs that the county health authorities are willing to focus on PPC. However, in order to ensure the sustainability of the interventions, this willingness will need to be translated into the inclusion of PPC activities in the district plan of actions

“We have managed to bring focus at that higher policy level and that is one of the things that we did to try and ensure that even when we leave the focus on post-partum care will still be there” (MOMI researcher₁)

“The county administration (...) have mentioned and shown their willingness to consider post-partum care as important just like the policy states and they are able to continue following up even after project ends”(MOMI researcher₁)

“The SCPHN [Sub-county public health nurse] that came for a supportive supervision visit also emphasized to us that the SCHMT [Sub-county health management team] has renewed focus on the postpartum period. He specifically mentioned that the supportive supervision visits take into consideration PPC and that this will continue even after the MOMI project ends.” (Field observations)

“We need to ensure the district management team takes up most of the activities” (MOMI researcher₁)

“In my opinion I feel that [no follow-up after MOMI] will not happen because currently as we speak I think we have got a committed county government and also we have got a committed committee for health in this county who are actually up to the task of making sure all the planned activities are undertaken as it is are now factoring in all the activities within our strategic plan and also the annual operational plans.” (Policymaker₁)

- It was highlighted at the workshop that the respect for the leadership hierarchies is very important, starting with the Reproductive health department and coming down to the district level. This should therefore be observed whilst trying to involve as many people as possible, in a similar way to that accomplished by MOMI.

"The norms (while laughing) start with the Reproductive health department then coming down to the district level. The project should try to involve as many people as possible. And then by the fact that it based itself on a community strategy which has its own laid down procedure of leadership we can say that the MOMI project can be given a plus when it comes to recognizing leadership structures." (Participatory Evaluation Workshop group)

- MOMI researchers have identified some HFWs that have acted as champions for the promotion of PPC and have worked with them on a one-to-one basis.

"one or two health care workers that we considered to be champions... we have interacted with on one to one basis to act as champions for post-partum care and they talk to their colleagues" (MOMI researcher₁)

Hindrances

- Besides including PPC activities in the district health plan, PPC also needs to be stressed by the health authorities having a comparable priority status with other health programs, such as PMTCT (prevention of mother to child transmission of HIV). However, it seemed that this would be more difficult to achieve.

"I: (...) what need to be done so that provision of services continue?"

R: The County, ministry of health should also stress on it the ways they stress on PMTCT" (HFW₇)

- At HF level, there were even some concerns or doubts that the focus on PPC will continue.

"She [HFW] told us that during this visit, the SCHMT [sub-county health management team] members were accompanied by a MOMI team member and she was not sure whether the focus on PPC will continue once the MOMI project ends." (Field observations)

Effective collaboration

Facilitators

- MOMI researchers and health policymakers considered that there was good involvement and support from all stakeholders, since they communicated and collaborated well. The Policy Advisory Board was highlighted as a unique space for meeting and debating among the different stakeholders.

"The district health management team has very supportive members... they still helped us and still continued working with us. The collaboration with the district health management team was perfect. The county health management team, we did not interact with them often as we did with the district health management team but they were also very supportive. With other stakeholders, the fact that we all sit in the Kwale health stakeholders forum

and we have this regular quarterly meetings meant that basically we could communicate and share what our activities and interventions are more easily (...) So we had a very good collaboration and very smooth interactions" (MOMI researcher₁)

"The MOMI project and we say that the project created a room for collaborations and this was facilitated at various levels. (...) At the regional level we have a policy advisory board, which is a unique practice. (...) MOMI actually went out and sort the skills from other partners on the ground and brought in different things" (Participatory Evaluation Workshop group)

"However we did acknowledge a team that MOMI said they can't do it all and they brought in other players to bring in other aspects of the project and that is why we said collaboration was good right from the community level to the regional level and that was a plus for the MOMI project" (Participatory Evaluation Workshop group)

- The capacity of local authorities was mobilized through trainings.

"This [the trainings] was done through the Ministry of Health mainly because if us as MOMI project, we could not just do it without involving the health workers because we were targeting more about the sustainability aspect of the project." (MOMI researcher₂)

Understanding the community

Facilitators

- MOMI were able to identify the needs and what could be built in the community.

"I remember identifying which community structures are there, which health system structures are there, what exactly are people doing right now even before we think we can improve on it and say, 'this is not being done, this is not right'. So we identified things like the community practices that were detrimental to post-partum care, community practices that can be built on in terms of improving postpartum care. Actually really understanding what is already going on and making sure all these structures are involved in now what MOMI was intending to do, what the intervention is about." (MOMI researcher₂)

"So what we are saying is the project went out to understand the community and also allow the community to understand them" (Participatory Evaluation Workshop group)

"Generally as a group we said you did well in understanding the community. (...) You have taken your time and effort to understand the community in Kwale." (Participatory Evaluation workshop Wroup)

"Regarding community dialogues, we formed the impression that since they are held as part of a structured community outreach event, it is possible that they will be more sustainable. These dialogue sessions are not organized as separate individual events but take advantage of other outreach activities." (Field observations)

Staff involvement

Facilitators

- MOMI tried to upgrade the knowledge and skills of healthcare workers and community health workers through training. This brought capacity building that is likely to remain.

"I would say that is where MOMI did play a very big role. (...) In terms of the skills that we have left them with, they will remain as long as the staff who are in that facility will remain there" (MOMI researcher₃)

"The focus of the intervention was to increase the focus on those healthcare workers and those community health workers so that they know the importance of post-partum period so I think up to where we have reached, I would say with probably up to 90% conviction I would say that it might...it will continue after the project ends. I can say that, the focus on post-partum care will continue." (MOMI researcher₁)

- The work done with the CHWs by increasing their skills and their focus on postpartum care may have led to a change in the beliefs of women (if not the entire community) at the HFs. Despite the fact they are volunteers, this motivated most of the CHWs to continue with their work.

"I feel like there is some change in the beliefs of the community there is some change in the practices of the community that I can ascribe to the kind of interventions especially the community engagement interventions that the project has at the moment done" (MOMI researcher₁)

"During one of the sessions one CHW stated he feels not motivated anymore to continue his work as CHW without being paid. Although most of the other CHWs present in the meeting disagreed with this. They found their function in their community very needed and rewarded even without being paid for it. They indicated to be motivated to continue their work even without being paid for it. (Field visit - January 2015)

- The stakeholder workshop highlighted the opportunity for improving the role of staff in general and of the CHEWs in particular. CHEWs were considered very important and their role should be maximized.

"We still can do a lot with our CHEWs [Community health extension workers]. The CHEW is the one who is actually mandated to propel the CU [community

unit] together with the chairman. The CHEW needs to be facilitated more down to the community level” (Participatory Evaluation Workshop participant)

Hindrances

- Trainings that are intended to build capacity require that the skills be updated and that the new staff are identified and trained constantly.
- A MOMI researcher referred that there might have been some “implementation fatigue” of the CHEWs. This was due to the increased workload and pressure from MOMI, since it was one of several projects in the community.

“May be somebody felt ‘this is not ours; they came, they have done and they have gone. So we can go about now our normal business.” (MOMI researcher₂)

“It’s possible that after a project has come and gone people are left saying, ‘thank God it’s over!’” (MOMI researcher₂)

“R: I was the chairman at the dispensary. All the reports that I received, I used to give feedback to the CHWs during reviews on our performance. Ever since I left, we don’t get any reports. The clinician seems to be overwhelmed. We only receive reports on immunization especially on missed vaccines when people fail to adhere to timelines.

I: He is overwhelmed by work?

P: Yes” (CHW₁₀)

- It was not possible to conclude whether the mobility of the staff was a problem or not. But the understaffing and the consequent increased workload were definitely hindrances to the sustainability.

“I think they [county health authorities] are not in control so much on whether a health worker remains in a health facility for how long. (...) So I am referring to staffing in general, not being able to be in control of how many staff you have, how many are trained and updated, how many are retained within the system, yeah.” (MOMI researcher₂)

“The MOMI team experiences some challenges during the training because of the lack of regularity of attendees for the sessions. This is not only a MOMI issue but a national one: trained health staff does not stay at the same position and thus cannot apply what they learned on the field. ICRH Kenya has no word in the choice of people who benefit from the trainings. The situation is also worsened by a shortage of staff in the field, which results in an increased workload for existing personnel. The issue of high staff turnover was also acknowledged by PLAN. This is a clear obstacle to implementation. However, this might get better in the future since the national system to handle health staff has changed. The new rules should allow for facilities to retain their HCWs longer.” (Field visit report - October 2013)

“Staff turnover in Kwale health facilities is not too important because it happens very rare, however understaffing remains a problem in some facilities.”
(Field visit report - January 2015)

“Most clinics are closed at night – no services provided/guaranteed at night (This is mainly due to understaffing and absence of staff quarters. This is recognised by the authorities and at some facilities the authorities started and/or are planning to build staff quarters)” (Field visit report - January 2015)

Resources and funding

Facilitators

- All the activities of MOMI were designed and implemented within existing resources.

Due to this, a health policymaker believed the interventions to be sustainable.

“I tend to think that there is sustainability, it does not need any funds, it does not need any more inputs, it is just a matter of us alone maintaining a culture that now we have assimilated within ourselves.” (Policymaker₂)

- During the implementation of MOMI project, the provision of MCH services at hospital level became free of charge, lightening the financial burden of attending the HF for women and therefore increasing the demand for PPC, as explained in section 4.4.3.

“In Matuga sub-County, Kwale County, in March 2013 all MCH services (including caesarean section) provided at hospital level became free of charges (abolishing of user fees and costs for additional services). MCH services at primary health care level (dispensaries and health centres) were already longer provided free of charge. At all facilities (first, second and third line) essential drugs (including FP methods) are provided free of charges. Referral transport is also free.” (Field visit report – January 2015)

- At the workshop, stakeholders referred that the county health authorities are increasing the funds for the health sector. This could be a great opportunity for the support of MOMI activities.

“The county government is actually allocating ample resources to the health sector and if the ministry staff can put in modalities for advocating for more funds which can be directed to maternal and infant health this should be a big plus for MOMI and the community in Kwale.

I: So there is an opportunity for the county to actually provide support? They should.” (Participatory Evaluation Workshop group)

- MOMI researchers referred to the opportunity created by the construction of new maternity units and how the capacities build by MOMI trainings can be used in such units.

"I can see right now the county government of that area is improving. They are building new maternity wards specifically for delivery and equipping them as appropriate so I can foresee a good level of sustainability of what they already know of or what we have already capacity built them on" (MOMI researcher₄)

- At the workshop, it was stated that the dialogue sessions at the community units would continue because this activity was included in the budget

"The support [for the dialogue sessions] will continue because it is in the budget." (Participatory Evaluation Workshop participant)

Hindrances

- The MOMI researchers stated that the financial constraints are a major concern. The lack of financial resources may hinder the continuation of activities, particularly the supervisions. PPC delivery would be likely to continue without such financial constraints, however, lack of resources was confirmed as one of the main constraints that the county faces over all. This was mentioned both by policymakers and HFWs in more than one HF. They felt uncertain about the continuation of the focus on PPC during supervision visits.

"If there are no resources then I will say that then definitely there will be no regular supportive supervision because you see their supportive supervision can even depends on resources." (MOMI researcher₁)

"So I think if you remove the disadvantage of resource constraints, there will be continued delivery of post-partum services" (MOMI researcher₁)

"(...) one of the constraints that we were facing as a county in relation to the Sub-Counties of course were things to do with resources. Resources in terms of transport, in terms of finances and one key thing that we actually appreciate is the support of our partners in terms of availing transport to the community. Secondly in terms of supervision again we occasionally get financial support to cater for the subsistence of those who are undertaking this kind of supervisory visits to the community so as I am saying these are supposed to be actually going on but because of the limited resources then somehow we are sort of constrained so there is no continuity yes" (Policymaker₁)

"One of the health workers we interviewed was not sure whether supportive supervision visits will continue focusing on PPC after the end of the MOMI project." (Field observations)

- Lack of supplies was another main barrier mentioned for continuation of MOMI activities, either be due to lack of availability or to the complicated management processes.

"We could have the community unit working very well coming in close contact with the mothers and everything but if they do not have the supplies to make sure that the mother is healthy it would not serve them well, so that is one aspect." (MOMI researcher₂)

"Some facilities experience stock-outs of long term FP methods, although it is not clear whether the issues are one of availability or of management. FP methods have to be ordered through the KEMSA (Kenya Medical Supplies Authority) which is a national authority, and not through the County authorities. This apparently complicated the order process and delays the delivery of the methods to the facilities. Some FP methods are provided by Marie Stopes, however their visits take place only every 2-3 months so they are not enough to ensure reliable stocks." (Field visit report – April 2014)

- The high attrition rates of CHWs create the need of constant training.
- Since the community health work is provided by volunteers, although they are highly motivated, they are still driven economically towards paid work and if this opportunity arises, they are likely to leave. Policy makers revealed that the county government of Kwale planned to provide a stipend, rather than salaries or wages as such, but that this may affect the degree to which the volunteers can be retained.

"They are called community health volunteers and they have to volunteer and whenever there is work for them to do anywhere else, because they have to fend for their families (...) they tend to leave the work (...) so there is a lot of attrition. That's the biggest challenge we have" (Policymaker₂)

"We shall not have any problem because sustainability of these activities is there because the community health volunteers that were recruited through the community units will be there and getting their stipend which is coming from the government which has actually been budgeted for." (Policymaker₁)

Intervention responsiveness

Facilitators

- There were adaptations to the content of community dialogues in order to include not only FP but other issues related to the maternal and child health (namely deliveries at HF). MOMI researchers believed that this change could be in part responsible for the

increase in deliveries at HFs. This change was a response to the needs of the communities and is therefore likely to persist after the implementation of MOMI project.

“Along the way we realized that we cannot just have community dialogue that focused on family planning by itself. So what we said is now we are going to have community dialogue and we are going to talk about other aspects of maternal child health care, so during this community dialogue they talked about family planning, then they talked antenatal care and also they talked about deliveries especially at the health facility or under a skilled birth attendant. So we have seen a good number of women from the community going to deliver at the facility going up, especially in those facilities where the numbers were low. We are seeing them going up. This might not be only because of the efforts of MOMI project; it might also be because maybe the government had a policy where free maternity services for mothers would come and deliver at the health facility without payment so that may have also contributed may be. But I can say we are seeing more women delivering which could be associated with the fact that now we are talking about delivering at the health facility during our dialogues.” (MOMI researcher₁)

Demonstrating results

Facilitators

- The continuation of activities are likely to be encouraged by the availability of promising results

“I have not been there but I am sure there was a possibility of having seen a difference in the study sites and if this is something that can be within the dissemination of the project results for example or within the project evaluation, if it can be convincing enough and people realize that, yes this is something that was done, this is something that gave this result and it is something that can continue beyond the project life, something that can be implemented like a day to day life of every on” (MOMI researcher₂)

Hindrances

- The possibility of demonstrating results is hindered by the lack of postpartum data. As referred during a PAB meeting, some HFs still did not collect postpartum data.

Community ownership

Facilitators

- The community representatives were involved and gave feedback to the community units, so it was more likely that the interventions would meet their expectations.

“In terms of community ownership even the MOMI project used existing community structures and the government mandated community strategy, the concept of community ownership was taken care of. Apart from that we can see the representation of the community. Community representatives were involved in different forums so these community representatives give feed back to the CU. So we feel that the MOMI project has given priority health facilities that had active CUs. MOMI new that they were here for a specified period of time and gave priority to community ownership yes” (Participatory Evaluation Workshop group)

“(...) Because when you come on the interventions and you don’t involve the community as soon as you leave you leave with the interventions. But once the community takes up and owns it, it’s going to be theirs forever.” (Participatory Evaluation Workshop group)

- MOMI researchers trusted that the community already has the information and knew the importance of healthcare services due to the learning from dialogue sessions. CHWs confirmed that women and traditional midwives had started to seek healthcare for delivery or immediately after.

“The community already has the information and information becomes power. Despites that area being one of the areas in Kenya where they have got cultural barriers to uptake of healthcare services. Once the women, and the community know the importance of health services, they will seek for the health care services themselves because they have been empowered in terms of knowledge and they have seen a difference. (...) So the community can see the advantage, they have the knowledge, they have seen the difference and we can see them seeking these services. I don’t think that will change. It will just improve.” (MOMI Researcher₄)

“They now take the initiative to come to the health facility after delivery without waiting for a CHW to tell them to. Most even now go to the hospital as soon as they get into labour. The traditional midwives in the community are also not comfortable assisting with deliveries after we held educational talks with them on some of the dangers of home delivery. It has been a while since we held such meetings with them though. In case they are called to assist in an emergency, they refer the baby and the mother to the health facility as soon as possible, because they now understand the dangers of handling deliveries at home.” (CHW₂)

- At MOMI level, it is also believed that the CHWs have internalised their role and they have increased skills in identifying and dealing with PPC.

"So I think they are useful and the thing I would say is, that the community health workers have now been are able to internalize that; they understand the

importance of doing those home visits and identifying these danger signs and referring them accordingly" (MOMI researcher₁)

- MOMI researchers noticed at HFs that HFWs are proud of being a MOMI HF and because of that they are more likely to continue to give attention to PPC.

"I feel like the majority of the health facilities that we have been working in will continue with that because they are even known as MOMI facilities...I think they take pride in that there is facilities where postpartum care service is being delivered in a certain way or there is focus on post-partum care service delivery." (MOMI researcher₁)

Hindrances

- Ownership of the interventions by the people on the ground depends on whether they feel it benefits the health of the community and whether it is for their own good or not.

"Even if the project has come to an end, the need is still there. (...) Continuity is important, but I feel the people on the ground really, really have to own what the objective of the project was." (MOMI researcher₂)

- Contrary to what was previously mentioned, some CHWs did not believe that women had changed their beliefs and behaviours regarding the need for PPC. As explained in section 4.4.3, determining if women perceive the importance of PPC proved to be difficult.

"I: If all the CHWs were to stop work, would the mothers still continue this way?"

R: Not all. Some will revert to the old ways

I: Why?"

P: They need to be regularly reminded. If we stop, they may forget what they had been told before and take it that the fact that we stopped educating them then it means it is not important any more. Some of these women don't get a chance to come and get any information from the facility. (CHW₅)

I: The changes that you have seen in the community with regard to health matters, do you think if you were to stop working as a community health worker these things will continue?"

R: They will stop

I: Why do you say so?"

R: The positive effects will not be there

I: Do you think that the community will continue practicing what you have sensitized them to?"

R: They will revert to the previous status. If I am not around to sensitize them, then things will definitely go back to the way it was before. I keep them informed and if I don't they will presume that what we have been teaching them is no longer important. (CHW₆)

Inclusion of the intervention in the package of services provided

Facilitators

- The interventions were not new to the health system. What MOMI did was to improve skills from HFWs and CHWs and also to structure the dialogue sessions.

"There was nothing new that we were bringing in. all we were doing was we were upgrading skills... Even when MOMI ends there will still be community dialogues because they are there in the community health strategy of Kenya. All that we were doing was to have it happen and occur in a structured way... So these are modifications that we had on things that were actually on-going in the health system, so we did not bring anything new in the health system" (MOMI researcher₁)

"I can say that, managed to ensure that everything that we do as part of MOMI project is actually what is supposed to be happening on the ground so that by the time we leave in January, it continues happening" (MOMI researcher₁)

- At community level, since the community dialogues were already part of the community structure, they would be more likely to continue. However as it is mentioned in section 4.5.1 the community dialogues do not actually take place.

"Regarding community dialogues we formed the impression that since they are held as part of a structured community outreach event, it is possible that they will be more sustainable. These dialogue sessions are not organized as separate individual events but take advantage of other outreach activities." (Field observations)

- At the HFs it has become routine for mothers and HFW to get/provide PPC after delivery or within 72hrs of delivery. Health policymakers referred that the sub-county health authorities and HFs have assimilated the need to focus on PPC and will continue to do so. This will occur, for instance, at supervision visits.

"Because most facilities have picked it up and it is now a trend we are following at the sub county level, we are zooming down to it. We have had our tools that wherever we go for supervision, we indicate, we actually look down and get to see if each facility is highlighting postpartum care, it is like a something that we have, it is a culture we have assimilated within ourselves and I tend to think that there is sustainability" (Policymaker₂)

Hindrances

- HFWs showed uncertainty about the continuity of the focus on PPC since this had always only been promoted by MOMI.

"The HCWs we spoke to said that no other project/initiative has been on-going in the health facility focusing on maternal and child health including PPC"

services. One of the HCWs actually wondered what will happen now that the MOMI project is about to conclude since she came to that health facility, she has not seen any initiative focusing on PPC." (Field observations)

"The HCWs we spoke to said that these supervision visits were meant to happen once every quarter but this was not always the case. She said that since she joined this health facility about nine months earlier, she had participated in one supervision visit during which all MCH/FP services were evaluated including PPC services. She told us that during this visit, the SCHMT members were accompanied by a MOMI team member and she was not sure whether the focus on PPC will continue once the MOMI project ends." (Field observations)

"In fact it is something that some of the health workers have mentioned that, 'now that you people are not going to be coming regularly as you used to do, what is going to happen to post-partum care services'?" (MOMI researcher₁)

Perceived benefits

- The positive behavioural and organisational outcomes from the implementation of activities can be regarded as reasons to continue with the activities. The outcomes referred by MOMI researchers were:
 - Women have changed their beliefs regarding the need to seek healthcare services. There are more women delivering at the HF and also more women coming to the HFs even when they gave birth at home and their children are healthy. Women are also opting more for long-term FP methods.

"So we have seen a good number of women from the community going to deliver at the facility going up, especially in those facilities where the numbers were low. We are seeing them going up." (MOMI researcher₁)

"I think those beliefs about delivering in a health facility, about coming to a health facility after delivering at home even when your child has no problem, I think those beliefs has changed.... Previously what used to happen is they were afraid they would be asked why are you bringing your child and the child has no problem... but now because of the work that we are doing with the community health workers emphasizing that every woman should deliver in a health facility and if by chance you deliver at home then you should make sure you bring your child yourself to the nearest health facility within 48 hours, so I feel like there is some change in the beliefs of the community there is some change in the practices of the community that I can ascribe to the kind of interventions especially the community engagement interventions that the project has at the moment done" (MOMI researcher₁)

- HFWs are more aware of PPC and are better skilled to deal with postpartum complications. Therefore, according to a MOMI researcher ‘there is general feeling that there is less referral’ to higher facilities. They are also more skilled to insert these long-term FP methods (IUDs and implants).
- The HFWs started filling out the postpartum register, which can be seen as an indicator of more focus on PPC. This is confirmed during the interviews and informal talks with the facility-based health workers. They showed that they identified the postpartum period as being important in the continuum of care for pregnant women.

"Because initially, they never use complete this postpartum register or the postpartum records, but, when we started the implementation of the intervention we were able to actually get regular data from this post-natal registers for those health facilities where we were implementing this." (MOMI researcher₁)

- CHWs now feel able to identify and to deal with postpartum complications and know when to refer to the HF. This knowledge was internalised and they understood the importance of their role
- As a major outcome, it was referred that the results in terms of postpartum indicators improved.

"They [county government of Kwale] had noticed that maternal deaths and foetal deaths had drastically reduced from MOMI sites as compared to other sites. So that is something." (MOMI Researcher₄)

- Health policy makers also agreed that MOMI had some impact both at HF and at community level.

"The presence of MOMI has actually made a lasting impression on to the staff and not just the staff but even at the community level. So I believe these measures will be sustainable and they will last" (Policymaker₂)

8.6 Replicability of MOMI interventions in Kenya

Identification of the core components

Since the activities were aligned with the national guidelines, they can be scaled up.

“I don’t think that would be a problem because this is what the guidelines say and that is what we did, we did as the guideline said about delivering post-partum care, so this is what we should be doing and then we supported the supervision, I think that is the same thing that can happen in any other health facility in this county so it is possible to scale it up.” (MOMI researcher₁)

“There was nothing strange that was introduced by the MOMI project or there was nothing different apart from making sure that whatever should be happening in the post-partum period is happening, whether in the health facility or in the community.” (MOMI researcher₁)

Adaptation vs. fidelity

The replication of the interventions to other counties and districts would have to take into account their existing infrastructures and particular characteristics (for instance, distance from HFs or particular cultures and habits of its communities).

“If it was possible like implementing it in the whole country, every health worker feeling the importance of post-partum care, knowing the guidelines, having the skills to do what they are supposed to do, having the time and the ability to do, it will be good. I am sure there will be a big difference in the country for where such implementation will be possible because I know you are aware in the country we have very difficult terrain, arid and semi-arid areas, nomadic, there are parts of the country that are actually nomadic (...) So I was talking about some parts of the country being in different kind of terrain so what we were able to do with MOMI in Kwale may have to be modified to...having the same objective, yes, but having a deferent mechanism of implementing the objective. I think that would be a good thing to try and improve post-partum care in other parts of the country using the model that MOMI used in Kwale with a few modifications to make sure it works.” (MOMI researcher₂)

“So if we were to try and make sure MOMI is replicated across the rest of the country, then it will be difficult for some communities to access the care even if the knowledge was there.” (MOMI researcher₂)

Community support

The respect for the leadership hierarchies and the involvement of the communities is very important to ensure ownership and endorsement.

"Because when you come on the interventions and you don't involve the community as soon as you leave you leave with the interventions. But once the community takes up and owns it, it's going to be theirs forever" (Participatory Evaluation Workshop group)

The support from policy stakeholders (as part of the community) is also important in order to put in practice what is already established in the law.

"I think that is one thing that if we are to scale these to other facilities in this country, then policy makers there need to be convinced, they need to be told how important postpartum care services are because like I told mentioned, the policy is actually very clear about the importance of postpartum care service delivery, it's just the practice that has the problem" (MOMI researcher₁)

"So involvement of all stakeholders is very important, it's very very important. In fact it's the most important" (MOMI researcher₁)

Role of the staff

The identification of the champion HFWs that can promote PPC care for their colleagues that were not part of the project can be important for the replication of activities.

"[HFWs] talk to their colleagues who are probably not in those health facilities that we work in. so, during reviewing their data meetings they talk about post-partum care, they make presentation on what they have been able to see during post-partum care delivery and so that is how we have tried to mainstream our interventions" (MOMI researcher₁)

Besides cultural and geographical differences between regions, there is also the need to consider the differences in the number of staff. It would be easier to implement PPC when there is more staff.

"The number of staff in the first place. It is an open secret that some parts of Kenya were better staffed than others. So they would find it easier to implement some things even if it is postpartum care or any other health care service. (...) So staffing would be one, that would make a difference in terms of the regions, and it would not just be between regions, even within regions because, if we are talking about for example, within Kwale, a dispensary just having one staff in one locality and in another locality they probably have 2. (...)

What I am trying to say is staffing can have differences between regions and within the regions” (MOMI researcher₂)

8.7 WP 7 Results: Sustainability of MOMI interventions in Malawi

Simplicity

Facilitators

- The implementation of activities was based on the development of guidelines according to PPC national policies. Since the guidelines were already being applied, health policy makers perceived that HFWs would easily continue following the guidelines and by doing this MOMI activities would endure.

“Okay, what is in place [for continuation of MOMI] more especially, is the guidelines...guidelines are there, and some guidelines have been pasted on the walls, so I think that when the health workers just see those guidelines, they will remember [since] they will act like a reminder, they will remember what to do.” (Policymaker₁)

Hindrances

- In general, the MOMI researchers considered the activities complex, since they required the involvement of different stakeholders within the health system and at the community.

“I think [the interventions] were quite complex because these interventions needed different players within the ministry (...) Especially, if you were to talk about sustainability at the end of the project.” (MOMI researcher₁)

Implementation duration

Hindrances

- In the opinion of health policy makers and MOMI researchers it was not possible to reach the full potential of the project since a lot of time was spent simply in planning its activities. The resulting short period of implementation was pointed out as the main hindrance for the sustainability of the project.

“We were talking about the five years as the project period. So, we understand that the three years was used for situation analysis and designing the package of interventions leading to only one, or maybe two years of implementation, which has really affected this project, according to makeup of the project.” (Participatory Evaluation Workshop participant)

"I also have a feeling that quite a lot of time was spent on planning and reworking on the plans, creating may be new tools with less testing with the communities." (MOMI researcher₁)

"Short period of implementation of interventions of one and half years as opposed to the intended three years. Which was partly due to the fact that there were change in of key management personnel both at PACHI office and the district health office team." (MOMI researcher at the Participatory Evaluation Workshop)

"It's unfortunate that we spent much time on planning. Well, okay, as a project we expected to spend much time in implementation so that we should have results. We have seen here that instead of targeting many TAs (Traditional Authorities), we have done it only at TA Malenga, just because of issues of planning which took too long. And the implementation was a little behind time." (Participatory Evaluation Workshop participant)

"We are saying that as MOMI, they had good interventions that were to be implemented but not all were implemented. May be it was due to limited time." (Participatory Evaluation Workshop participant)

"Evaluation means the end of everything (laughs) so I am wondering, it is starting and yet you're evaluating (laughing)

I: I am starting and then I am evaluating (laughing)

R: (laughing) evaluation is end of whatever

I: Yah, this is the end of the five-year plan

R: ...oh oh oh...we are in trouble" (Policymaker₂)

- Besides the short period of implementation, MOMI activities also stopped for some time, due to changes in the PACHI management team and to a complete turnover in the district level team related to MOMI. This led to the loss of trust from the community. As explained in chapter 5, for example some HFWs that did not receive MOMI training thought the project had already phased out during the end evaluation. At the community MOMI volunteers were waiting for the second part of the training and their efforts to sensitize women on issues related to PPC are undermined when women go to the HF following the advice and receive no PPC once they are at the HF.

"Because it's like we just withdrew. It wasn't officially communicated that this is the end maybe it's some things are happening, it might come back later. It just silently died out. And then suddenly, it just came up again. (...) So this time if it decides to go because now the community is starting a little bit afresh I don't know. The sustainability might be a little bit difficult" (Policymaker₂)

Leadership

Facilitators

- The government supports the changes in the guidelines for PPC and the health policy makers feel that MOMI activities will continue *"as long as the guidelines are there"* (Policymaker₁). But even though there are PPC policies, the mechanisms to put such policies in place are still needed and this process can be slow.

"I: So is the government supportive to these policies you're describing?"

R: Of course I may not necessary speak on behalf of the government per se

I: But for the district?"

R: yah but from the look of things, I can say that whatever is being brought is in line for what with the other district government policies. Does not contravene any of the government policies or the guidelines" (Policymaker₃)

"Those at the health facility will continue because as far as they have been adopted by the leadership, they are adopted they will continue." (Policymaker₃)

"I was saying that even our policies are a little bit weak, in terms of reinforcement. (...) If we say it is mandatory for every woman to report to the hospital, during the first week of birth or at six weeks, then we should put mechanisms in place! Look at the under-five child; (...) When a child is born, it is immunized straight away!" (Policymaker₂)

- PACHI and MOMI are well connected and strategically placed to drive the agenda for postnatal care, but the support from key health policy decision makers is mandatory. Evidence is needed to encourage support at this level. One policymaker suggested that a policy brief package for action with the results of the project is given to them so the Ministry of Health (MoH) and other ministries are able to take actions.

"So MOMI is strategically placed to make those changes because its membership has all what it takes to drive an agenda" (Policymaker₄)

Hindrances

- Nevertheless, the lack of political will was referred as a possible barrier.

"I: What could be the barriers to the MOMI intervention or the barriers that will not make MOMI interventions fit for policy direction or policy change? ...lack of... what would be the barriers?"

R: Lack of political will

I: Lack of political will from where?"

R: From the leaders" (Policymaker₃)

- The difficulties and delays in implementation were due to the staff changes within the team coordinating the project. This had a negative impact on both the implementation and sustainability of the project.

"Apart from duration, I think leadership also matters. If the coordinator who was coordinating MOMI was not moved at the district, the likelihood of continuing MOMI was obvious. If the MOMI team had stayed longer these activities would have continued." (MOMI researcher₂)

"Change in management affected the implementation and sustainability of the project." (Participatory Evaluation Workshop participant)

- The involvement of policy-level stakeholders could have been stronger and this was potential that remained unexplored. For instance, one of the PAB members expected to have a different role, for instance to have more responsibilities. This member was enthusiastic about his/her expected role and felt that had much more to contribute. However, no opportunities were given by MOMI PACHI in order for that to happen.

"I think it's like the ...motivation, the energy for you to discharge the duties was not really there... because it was like, "By the way" kind of thing, you know? You were not like...being pushed as you would if you were told that... [if] you were given that (...) These are your roles... and these are your operating procedures. I did not feel that, you know, passion to be part of that group; that's what I can say, unfortunately. (...) I lost the enthusiasm that I thought... for the things that I thought I would contribute. I didn't see myself really coming up with these ideas and pushing the agenda forward for MOMI." (Policymaker₅)

Suggestions

Some suggestions were made in order to improve the sustainability of interventions from the leadership perspective:

- Ownership of the project. At the end of the workshop, one of its conclusions was that the District health office (DHO) should own the interventions. Such ownership would facilitate the incorporation of PPC activities within the HFs. It would, for instance, help to deal with staff turnover and the need to train new staff members, since the DHO would be the responsible for their training and supervision. That is, it was felt that the interventions should be DHO interventions and not MOMI, meaning that *"health workers and all the staff, we should take the interventions head on"*. If the interventions were DHO interventions, they would be more likely to happen rather than stop in the future.

“A good example is like what I said that when MOMI was at a standstill, everything was at standstill, nobody was taking care of it”. (Participatory Evaluation Workshop group)

- Reinforcement of the policy/protocols for PPC. Since some of the health professionals sometimes ignore their training, there is the belief that if PPC policy/protocols were reinforced, HFWs would pay more attention to them as part of their job.

“So, if those policies are re-enforced, it will not even need a project to come in Ntchisi that we need postpartum care services at six weeks, whatever. It is part of our job. So, those policies have to be re-enforced. Also in line with this need more political will that policies reach everyone by making sure that everyone has the closest distance to the health facility care.” (Participatory Evaluation Workshop group)

- Quarterly review meetings between the DHO and partners from NGOs. This was considered “a brilliant idea” by other stakeholders.

“Suggested that there should be coordination with partners by means of review meetings; say quarterly so that we are able to share evidence to guide the district health office implementation plan” (Participatory Evaluation Workshop participant)

- Identification of the *key players*. Those that are passionate and can be the drivers of the project and carry on with its activities even when the project ends. It is important to support these people by incorporating the activities in the District Implementation Plan (DIP) and have budget for it.

“And the other thing is also to identify the key players. Who are people – there are certain people who don’t mind about doing certain things; without money, they just have got the passion. So if we identify those people to say, “These are the drivers of our project. Let us support them. And if those people are respected for what they are doing, I think it is something that we can say that even after the life of the project, they can have it.” (Policymaker₄)

Effective collaboration (from stakeholders)

Facilitators

- For the MOMI PACHI team, one of the most successful aspects of MOMI project was not only the strong commitment from the district health office and the whole district health management team but also the strong work relationship and collaboration with other stakeholders in the District Assembly.

- The MOMI project approach involved several stakeholders from the health system including the ministry, the district council, other NGOs (although the extent of this is unclear), clinicians, and HMIS officers. At the community level it also involved HSAs and volunteers. The stakeholders emphasised that the project team was very clear about the limits of the interventions and support for implementation in terms of time and funding and the degree to which they were involved in this process.

"Oh like I said the chiefs are doing a lot. In terms of empowering the community with information regarding dangers of home delivery but also there are so many partners that are working with government either at national level or at district level to strengthen maternal care and postpartum care as part of maternal care" (Policymaker₅)

"As a project, I think the...the approach was more of a participatory ... not you going and imposing in Ntchisi (....) So I think that participatory approach helped a lot in making some of the strides that the district had made. Ya! And I am sure if MOMI was to go away now, Ntchisi would have benefited if they are serious with their approach." (Policymaker₄)

"The district implementation team is supposed to lead, it should be the one leading the implementation, the PACHI team was supporting and facilitating and making sure it goes in the right directions and working things together with them. The advisory team, RHD and the other partners were looking at more kind of at policy level. Or to learn what MOMI is to do and probably and may be if there are good results then maybe they can be taken into national consideration. That's my understanding of how things were set up." (MOMI researcher₁)

- At the highest level, there was also collaboration from the health authorities in terms of using MoH personnel and structures.

"But in terms of using their various structures, considering that our government is already constrained we cannot expect much from them but in cases of where government has capable structures to assist MOMI there wasn't any problem." (Policymaker₂)

- In terms of provision of PFP, in particular, there was a partnership with other NGO long-term provider that may facilitate the sustainability of the intervention regarding PFP. However, we can conclude from data presented in section 5.5 that 'HFWs rely on NGO staff to provide the services at the HF and in the community'.

"Banja Lamtsogolo which offers contraceptive services on designated dates in various health facilities. That's a great opportunity because some, some will be using the methods that are not routinely offered by our health facilities" (Policymaker₃)

Hindrances

- The data also suggested that there was a lack of effective collaboration from the stakeholders.

"Weak partnership at all levels, starting from partner PACHI to DHO."
(Participatory Evaluation Workshop participant)

- As previously highlighted, the policy stakeholders felt they were poorly integrated in the project. It took them some time to understand what MOMI was about and what they needed to do. They stated that they lost the enthusiasm they had had in the beginning since they were not being effectively involved.
- At the HF level, the HFWs also did not feel involved in the project from the beginning, and therefore ended up rejecting it.

"I don't know maybe the ones who were introducing [MOMI activities] made it more of a secret than something that people [HFWs] should know about. (...) So when it had started getting out, people were like aah why should you be telling us today yesterday the other day you didn't want to tell us. Now that you want something for us want to tell us this. You know people can be like you're trying to get this and this and now you're telling us. They were kind of rejecting it so for it to settle down." (Policymaker₂)

Understanding the community

Facilitators

- The implementation of the activities benefited from the existence of community structures and groups that were willing to be part of it. From the perspective of a MOMI researcher, the communities (where MOMI was implemented) were happy with the interventions and this may help to ensure their continuation. However, the results presented in section 5.6 point out that the intervention 3 had a limited implementation and raise several issues concerning the lack of support from the implementation team to the CHWs activities, lack of motivation of CHWs and compromised trust of women given to CHWs but also to the MOMI project.
- The activities at a community level will continue if the DHO does frequent supervisions visits, which, unfortunately, did not happen regularly during the implementation period (see chapter 5).

"We can sustain them through frequent supervisions" (Participatory Evaluation Workshop participant)

- Some policymakers believe that women are now more aware of PPC and more motivated to go to the HF, which however cannot be confirmed by the case studies. According to the policymakers, the growing number of young women delivering at the HF on their own (who previously would have delivered at the hospital with their mothers and grandmothers) is one example. However, these women need to be empowered so that they themselves recognise the risk signs that they should look for in themselves and in their babies, to know what care they should receive and to be able to challenge when there is a lack of appropriate care provided.

"And today's family is also changing. Previously, a pregnant woman would go to the hospital, stay with the mother, grandmother and all those people. Now, we have young people delivering on their own, discharged home, they stay alone, they see complications arising, they have no clue about what to do! So if we empower those to say, 'If you see this, rush to this point!'"
(Policymaker₄)

"It is just not enough for them to be motivated. They er... also need to be empowered – to demand the service. Even if you went to the women today and ask them, 'Were you happy with the antenatal service that you received yesterday? They will say, 'Yes!' because we have not told them what the normal expectation is!'" (Policymaker₃)

"So let's look at those factors and address them to say, 'This is what we should do' and let the women also complain if they are not treated well in the postpartum, because they always complain in labour. mwana wanga wafa! (my baby has died), m'bale wanga wafa (my relative has died) but when they die outside that, they don't know that they can also raise those issues."
(Policymaker₄)

- It was mentioned that women are responsive to health campaigns and this is one way of transmitting information about the importance of PPC for both the health of babies and also of the mothers. This can be of particular interest since, as explained in section 5.6.2, women's main motivation to demand PPC is related to the infants care whereas their own wellbeing is rarely mentioned.

Hindrances

- There is a difficulty in ensuring the involvement of men in PPC when they do not perceive any direct benefit. However, this is a crucial element of ensuring continuity of the activities at community level.

"But then our men don't go to things that they know there's no money on it (laughs) unless... unless there is something they can benefit from so they attend." (Policymaker₂)

“And even if you equip the women with the necessary knowledge and information but if they are not empowered, they cannot do anything. (...) And by the end of the day they will just leave the information, so male involvement is really vital” (Policymaker₂)

- While stating the need to understand the community, a health policy maker put forward that the community should be seen as a system with traditions, practices and beliefs that involve different aspects (health, agriculture, etc.). Hence, sometimes the community may be more interested in one issue and not as much with other. So MOMI would need to understand very well what was going on at the community level in order to be successful.

“So the opportunities if, if possible may be next time if people are trying to implement community projects they should go there as may be a system too. You put your own input on health and may be they would somebody from agriculture and do the thing together so that everybody can be involved. And usually in our setting, males are the champions of almost everything.” (Policymaker₂)

“The other factor is community beliefs and practices; we understand that much as we bring change to the community, they also have their own understanding and practices in regards to postpartum care. ... So, with time they should also take time and think how best they can penetrate the community, much as we are bringing our interventions on them.” (Participatory Evaluation Workshop group)

Staff involvement

Facilitators

- The interventions did not greatly change what the HFWs or HSAs were already doing, but simply added to their roles. Nonetheless, the specific training received through MOMI gave them skills that are likely to remain after the project end.

“It’s likely and that we hope ... but we cannot say it ah [noise] wholeheartedly because we don’t know what may be changed, but why we think it’s likely that we can maintain and continue with that is because these people were already doing the work as specific to their profession ...whether as a nurse, a clinician and an HSA ... so what we had from the project was just adding to what we already know... and the practice did not demand much of the money ... okay, so because it’s much of non-monetary issue I don’t think there will be any problem in trying to continue with it because it’s to reinforce the

behaviour change ... and to continue the work that they already know."
(Policymaker₆)

"And for example the training the health workers have had; The skills they have gained will not only be implemented for this project; when this project goes away they will continue to use those skills" (Policymaker₅)

Hindrances

- There were some problems concerning training of MOMI community volunteers and HSAs due to the delayed implementation. They did not receive all the phases of training in the group model MOMI that had been adopted to strengthen PPC at community. This decreased their involvement with MOMI activities.

"At the community we were looking at them, as we heard here that so far they are on Phase 3, and they were not trained on the following phases. Because we feel that if community volunteers were trained properly, they would have continued smoothly. And we felt that was a gap." (Participatory Evaluation Workshop participant)

- The high mobility of people for financial or administrative reasons led to a high staff turnover at the community. In the words of one of the health policy maker:

"It seems once somebody has moved from one area something else goes backwards instead of forwards" (Policymaker₂)

- Newly rotated HFWs did not receive MOMI trainings when they started working in a MOMI HF. Therefore, several participants pointed out that there was a lack of knowledge from new staff on what MOMI is and its tools. This was also explored in section 5.4.1.

"I: Like maybe it's a new nurse coming, whether it's from school or from another district to work here and then you know we have MOMI at Ntchisi district hospital. What do you do?"

R: I don't think there is deliberate effort to orient these people using members of staff specifically into issues having to do with MOMI of course people were oriented about the project some time back but not necessarily having sessions for new members of staff

I: But you still have the new members of staff coming?"

R: Yah we have

I: And they don't know about MOMI (laughs)

R: Yes" (Policymaker₃)

"Another factor that was seen as to hinder sustainability is lack of awareness of MOMI project at all levels.... the sense that most of the health care providers didn't know what exactly MOMI is..." (Participatory Evaluation Workshop group)

- The poor attitude of HFWs when delivering PPC was also referred as a barrier to the implementation and sustainability of the project; since HFs and HFWs were not ready and/or willing to provide the appropriate care, there is still a need to increase staff awareness and benefits of providing PPC; otherwise, even if women are told to go to the HF, their poor experiences will make them not go back. This was also explored in detail in sections 5.4 and 5.6.

"Then this coupled with added health care workers' attitudes, it just complimented the issue. As a result, if you ask workers from the facility on MOMI tool, they would say I don't know that." (Participatory Evaluation Workshop group)

"Okay, and secondly, another barrier is our attitude. When I say 'our' I mean health worker's attitude towards postpartum care. Er... most midwives are knowledgeable about postpartum care but, maybe they have not appreciated how much it kills women if we do not provide it." (Policymaker₄)

"Poor quality of PPC services that were below expectation which he speculated that may be it is due to the poor attitude of service providers... can affect the sustainability of the project" (Participatory Evaluation Workshop participant)

"Health care provider attitude; sometimes it's not an issue of shortage or whatever, but it's just individual attitude, people will just choose maybe not to give out some services." (Participatory Evaluation Workshop participant)

- The lack of accountability of the HFWs (explained in detail in section 5.4.3), which could lead to poor attitude and low motivation for providing good care (previous point) was also referred as a barrier to the sustainability.

"There seem to be so many freedoms around. Because of lack of supervision of health workers." (Participatory Evaluation Workshop participant)

"There are no consequences to whatever we do. You can neglect a patient, you can do whatever, but there are no consequences." (Participatory Evaluation Workshop participant)

Resources and funding

Facilitators

- HF interventions are more likely to continue as compared with the community ones, since they involve less costs to the DHO.

"But for the facility one, they are more likely to continue considering that the cost involved might be minimal as compared to the community one"
(Policymaker₃)

Hindrances

- The data suggested that a lot of resources were needed in order to not only implement but also continue with the activities (namely human and financial resources).

"One of my observations is that MOMI was very good with the concept and the work packages were very good and clear. But when it came to interventions they [the MOMI project] wanted much resources to support the interventions." (MOMI researcher₁)

- The continuation of MOMI activities will depend on how well the government priorities and will be able to fund the district. If PPC is included in the District Implementation Plan (DIP) of the DHO, then they will be obliged to provide the funding for the supervision visits both at HF and community level, to provide adequate and needed equipment at HFs and to reprint the guidelines that are on the walls. In general, the DHO must acknowledge that the lack of human and material resources may increase HFWs workload resulting in a poorer experience for women.

"And the other thing that is also important are the issues of funds, this is in the DIP that MNH is a priority... then we must honour that... and we must be seen to be putting the resources in the priority areas and not just talk about it." (Policymaker₄)

- During a PAB meeting in April 2015, The DHO stated that providing incentives to motivate CHWs is not a sustainable solution due to the challenges the district health offices face in terms of funding. However, during a PAB meeting these incentives were considered fundamental to ensure that CHWs will continue doing their work.

"Most programs have died a natural death because they were depending on the volunteer. So, volunteerism is not a way to improve on the health care, err together. They may be long, but so many programs have died after the initial period because of volunteerism." (PAB meeting – April 2015)

- Separately from provision of any kind of incentives, the basic resources and means ("necessary tools") that are needed to conduct the work are required to be provided.

"If you're asking someone to do his work, you have to provide them means. That's not really incentives. But if you asking people to do something and they don't have the means. This is very difficult. It doesn't matter how much you motivate them! But if you are not giving them the, the capability or the resources to do that." (PAB meeting – April 2015)

- The government facilities depend on the donor, *"so once a donor decides to slow down, we also slow down I (...) if he is active we are also active"* (Policymaker₂).

"It depends on government funding; I wouldn't tell how well they would be supported since I know that there's a general problem when it comes to financing the districts by the government" (MOMI researcher₁)

- Some interventions were either not implemented or only partially and at an early stage of the project. Therefore, in some aspects it would be premature to talk about sustainability and whether there would be resources to continue. However, health policy makers showed some expectation that PACHI would be able to find other support to continue with the project.

"So as PACHI I am hoping that uhh we would find other type of support so that we can continue to support the districts; so that these interventions should not come to a standstill simply because the project is gone." (Policymaker₅)

"Is there a possibility of asking for an extension if the resources are still there, so that those outstanding activities can be done or not?" (Participatory Evaluation Workshop group)

- The lack of funding had a negative impact on some activities during the implementation of MOMI. This led to clinical mentorship ending prematurely. Another example of the impact of lack of funding on MOMI implementation was that, although there was a car for MOMI, there was no fuel and therefore supervision visits were at the expense of those performing them.

"With the support from MOMI we were conducting mentorship and went through all health centres it was like to [door banging in the background] mentor nurses and medical assistants and even here at Ntchisi District [hospital] we also conducted mentorship but due to funding problems, [noise in the background] we just stopped." (Policymaker₁)

"Yes, I was going there and there was no funding for that. I would hire a bicycle taxi and attend. After some time, I am also a busy person, I have some other things to do. (laughing) I was like this one is consuming my resources. Because if you ask them they say there is no fuel. By then we had a [MOMI] car but it wasn't being used because there wasn't fuel allocated to it." (Policymaker₂)

"But I think if you left it on their own, I think it would still continue but will depend upon availability of you know, fuel and funds and stuff like that" (MOMI researcher₃)

- Lastly, some missed opportunities may still exist regarding the use of resources such as mobile phones and cards (used for immunisations) that are being applied in other health areas but not on PPC, and were not explored in the project.

"And even in these days in the time of technology where every Jim and Jack has a cell phone, and even Airtel [a service provider for cell phones], advertises to say "If you want to know about health..." why can't we go in there and say "This is the midwife you can call in your local area"? You know? We have things there, but we are not making use of them, because at village level, there will always be somebody with a cell phone. We may say it is private, but people are doing a lot of things with phones now!" (Policymaker₄)

"R: And we are missing [raises her voice] we are still missing the opportunity, when the mother is being moved for the first vaccine, the next vaccine, the mother is there! But we are doing nothing with the mother. So put something there.

I: Do you have ideas... [respondent quickly answers]

R: Yes!

I: ... maybe how we can track those postpartum women?

R: Same card for the child! She doesn't have to have two cards. You know women are sacred, "If my child gets sick, I have missed vaccinations, I will be punished at the hospital. It is not a good thing but it makes them, you know, go in the right direction. And this is why our colleagues have done very well in terms of MDG IV,... because of that simple technology, ya, the mother has it, why not have something for the mother as well? Ya!" (Policymaker₄)

Intervention responsiveness

Facilitators

- Only one aspect about the intervention responsiveness was mentioned which was the possibility of combining PPC with family planning, a key factor to help to ensure sustainability that is receiving an increasing amount of attention (in particular, the intervention 2).

"So, if that will be the focus, and there is a lot of talk about this, on family planning, how you could combine that with postpartum care. Yeah. So, if that is going together as a package and not a stand-alone." (MOMI researcher₁)

Demonstrating results

Facilitators

- The Health policy makers are expecting to share the evidence from MOMI and hence scale up the project nationally.

"And even if you are gathering information, HMI...HMIS (Health Management Information System) should also have a record of those things, to say... because I cannot be just doing things anyhow, no! We are working towards something, we need to show somewhere that, "This is what we did and these are the results." (Policymaker₄)

Hindrances

- The poor quality of data record may hinder the production and sharing of information that is needed and expected.

"The tool that we are using, I don't think there is enough information about postnatal care. So, maybe we also need to revise that so that we include some of these important elements about postnatal checks" (Participatory Evaluation Workshop group)

"Poor record keeping and lack of proper project monitoring mechanisms." (Participatory Evaluation Workshop participant)

Community ownership

Facilitators

- One of the participants at the workshop stated that the district was "very lucky" to have MOMI implemented within the district. This can be regarded as a sign of support and appreciation of the project, which increases the likelihood of sustainability.

"Here at Ntchisi we are very lucky that this project was being implemented this only here out of the whole Malawi." (Participatory Evaluation Workshop participant)

- In general, the health policy makers believed that the communities have integrated the need for PPC and are now aware of it. However, according to the results presented in section 5.6 'Several CHWs and some women speak of a change taking place in the community – with more attendance to the HF and less maternal and neonatal deaths in the community. A change however that cannot necessarily be linked to MOMI given the limited implementation of community interventions and that several organisations are also working in the communities to promote safe motherhood.'

"I think it has spilled over to Ntchisi somehow to some extent. The communities now take some kind of responsibility for the health of women and children. So... and I think people are now aware of the postpartum issues that are challenging for both mothers and women." (Policymaker₄)

Hindrances

- There was not enough involvement or consistency in the implementation of interventions at the community level.

"I: Can you just explain more; what do you think are the factors that should be considered for sustainability of the MOMI interventions?"

R: Uh huh. I think one of it is what I have already said, involvement of the owners, ... right from the inception of the project; (...)"(Policymaker₄)

"Maybe if it was consistent from the beginning there could have been sustainability because it was something the community had accepted"
(Policymaker₂)

Inclusion of the intervention in the package of services provided

Facilitators

- MOMI was in line with the national priorities. Even if it did not create any new programme, it strengthened the ones that already exist. For instance, the guidelines that were developed for MOMI were already part of the national plan.

"Because remember eeh maternal health is the priority program for government and what MOMI was doing is not something different that government is not uhh implementing. Remember I told you about protocols and guidelines of care? What MOMI did was actually to strengthen the use of these protocols. So it was within the existing guidelines, they didn't come up with new guidelines" (Policymaker₅)

"The guidelines which we developed for MOMI we took it from National guideline for Ministry of Health." (Policymaker₁)

"So this one is not necessarily coming out outside of the MNH (laughs) but rather is just trying to fill in gaps ...of the... in the MNH interventions"
(Policymaker₃)

- We can hope that DHO activities related to MOMI will continue, because it is already part of their job description. Also one of the policymakers' participation in MOMI activities was directly related to his job description so he stated he will continue doing what he was doing as well:

"Yah if I ...I ...I can say that is enough I have done, then I am resigning from my post but otherwise whatever I was doing I will keep on doing as long as I am here because they are directly linked to my job description" (Policymaker₃)

"I: So do you think will their involvement continue in future for those people, the most influential people?"

R: Yes, it will continue unless they resign from their post... yes because it's part of their job description" (Policymaker₃)

Hindrances

- However, according to the MOMI researchers, the activities were not part of the health system plans and they were only integrated during MOMI implementation.

"I: MOMI interventions are part of the national or district health plans? Were they already part of this plan or its integration was after MOMI implementation?"

R: No, it was not there before, so the integration was happening during MOMI." (MOMI researcher₁)

- The incorporation of the interventions within services was most likely not fully achieved, since MOMI activities were not part of the DHO plan. Hence, in order for MOMI activities to continue, they need to be integrated into the district implementation plan:

"I think what will happen is that we may lose some of the interventions because integration of the activities is not easy as the concept." (MOMI researcher₁)

"Some lack of planning of MOMI activities... It's coming in kind of lack of ownership. ... The project came but the DHO didn't take anything like the D.I.P in cases of sustainability. It was just MOMI activities from PACHI only." (Participatory Evaluation Workshop group)

"If we are to talk of sustainability, it [MOMI activities] has to be there [in the services plan], even at the time of the start of the project. Sustainability is not like you are handing over. Sustainability is not a handover process. It's a building process." (Participatory Evaluation Workshop group)

"Yea. Like what I said during our last meeting that was one of the things we had tried to stress that there is need to integrate the projects activities into the district implementation plan so that there is continuity." (Policymaker₅)

Perceived benefits

Facilitators

- The health policy makers appreciated that MOMI tried to focus on PPC by involving the HFs and communities. This allowed a gap in the health system to be filled, where much more attention had previously been given to ANC. This effort was acknowledged and appreciated (MOMI impact in Ntchisi has been appreciated even by stakeholders from

other districts) even though there has been no report about changes in mortality. The respondent considered the changes brought by MOMI guidelines for PPC as positive.

"It has affected the health system in a positive way" (Policymaker₁)

- MOMI activities should continue since, in the perception of a health policy maker, women will continue demanding the services and they need to have good quality of care and good experiences.

"Because when MOMI comes to an end, the mothers will not stop coming to the hospital would they? (...) They will continue so we would want the activities that have been strengthened to continue." (Policymaker₅)

Hindrances

- As stated earlier, the poor experiences at HFs when women seek PPC are a barrier to the sustainability of the project.

"But when they go to seek such services... the provider would only check the umbilicus of the baby, but not check whatsoever on the mother. Instead the women are being demotivated, and other women never dare to visit again." (Participatory Evaluation Workshop group)

8.8 Replicability of MOMI interventions in Malawi

There were some concerns about the replicability of the interventions due to their lack of implementation.

"If we say we are to replicate it means all steps have been met, yet we have been saying we did not implement them all. Then what are we replicating or what are we sustaining?" (Participatory Evaluation Workshop group)

"I was saying we first need to demonstrate the model that is workable and sustainable. The implementation of MOMI did not succeed in showing a model that can be [fitted to scale] so it's a bit premature to say because what are we going to take at the national level? We don't have anything to take to the national level." (MOMI researcher₃)

Identification of the core components

There is the expectation that the project will be scaled up nationally.

"But what we will be looking at is that has MOMI generated enough evidence for us to convince the country that this is the way to do business. So that's what I am hoping would happen at the end." (Policymaker₅)

Role of staff

One of the MOMI researchers raised some concerns related to the importance of PPC and its dependency on the value given to PPC and know-how the staff in charge. This raised the issue on how leadership in each region can affect replicability.

"To be very honest I am not very sure because a lot of these postpartum... there are established guidelines and stuff but it's not necessarily that every institution, every district will follow them. But a lot depends on the staff who is in charge. And their previous experiences of dealing with postpartum care. So it's very difficult to say whether there's a difference. What we implement in Ntchisi and what we implement in other districts that's one thing. But the other thing is also that actually MOMI didn't have much in terms of postpartum interventions." (MOMI researcher₃)

Attending to process

To help and ensure the replicability of the project, there is the need to plan properly and have a clear time frame in order to not spend too much time in planning and then not have enough time to implement again. Sharing the lessons that were learnt is fundamental so when replicating it is known what worked and what did not work.

"I: do you think the approach that we are using here should be the one to be used to implement the MOMI activities in other districts or the entire country?"

R: Yes, it could be used. You start small and then you scale up but make sure the implementation should be taking long than the deskwork. That the area the area of most work." (Policymaker₃)

There are no differences in the expected PPC that women should receive across the country so the interventions could be replicated. But there are differences across regions that must be taken into consideration. They may result in different outcomes depending, for instance, on the leadership and on resources. Some leaders may be more sensitive to the topic while others may not be. The resources available and the willingness to make them available can also differ.

"R: The interventions for Malawi they are almost fitting across the country.

I: So you think the approach here is whether they should or could be implemented in the entire country?"

R: Yes, yes, very much so." (MOMI researcher₁)

"Take them to task, "What is it that you can do for us?" so I think those are some of the issues. That we will see as different from one place to another. You find that that district is very active and you find another district is almost dead" (Policymaker₄)

"And then secondly, it is the availability of resources. You find that in certain districts, you have people who know what should be... or what should go in this area. And for those that cannot find those things, you find that they put in extra effort, they even look outside the hospital budget." (Policymaker₄)

"I will not be able to tell the factors in advance. Because apart from maybe other districts being a little bit more complex maybe in terms of distances and stuff like that... (...) On the organizational level. There are big districts where the distances are very far from one facility to the other." (MOMI researcher₁)

Community support

There is the need to work together with other stakeholders/institutions/projects dealing with similar aims in the same geographical area paying attention to what others are doing and where when scaling up interventions. There was a feeling from some that it may be more useful to go to places where nothing is being done.

"We have seen here that within the same TA that MOMI started their community intervention, there so many partners on the same project goal. It should not be all the partners in TA Malenga." (Participatory Evaluation Workshop group)

8.9 WP 7 Results: Sustainability of MOMI interventions in Mozambique

Simplicity

Facilitators

- MOMI researchers and health policy makers found the interventions easy to implement and stated they would easily continue.

"They were very easy. They were improving access to family planning, postpartum and neonatal care" (MOMI Researcher₁)

- Interventions 1 and 2, risk assessment through the use of a checklist and the improvement of access to PFP respectively, were the easiest to implement. The

checklist was recognized as an easy tool, both by HFWs and CHWs, since it helped them in their daily work. Health policy makers also noticed that this was an easy tool that would allow CHWs and HFWs to remember what they need to check during the PP consultations. Intervention 2 - improving access to PPFP – benefited from the fact that the government provided the FP methods (namely the IUDs) for free.

"The checklist, for example, for the facility, all that we have to submit is there, community checklist is also there with images and the corresponding pathology... at least the provider in the community, an APE or at the facility remembers that something must be asked, because whether trained or not, one can forget, but with something like a guide, a checklist, I think this is one of the greatest achievements that we have" (Policymaker₁)

"We, the APES are very pleased that our checklist helps us identify the existing conditions in the community with the mother and the baby. Everything is easy." (APE₃)

Hindrances

- The most difficult intervention to implement was the integration of services - the "one-stop shop" approach. Even though this was already a national strategy, there were some difficulties in its implementation. MOMI researchers referred the lack of understanding of the intervention by HFWs as a barrier to its implementation. In order to overcome such barrier, the HFWs would need more technical support and more training.

"I see that maybe it is more difficult to implement integration, it demanded more technical support, a little bit more training... because even nowadays with some trainings that we carried we notice understanding difficulties from them" (MOMI Researcher₂)

Implementation duration

Facilitators

- At a policy level, it was considered that there is the need of more time in order to understand how the activities will continue at community level. For health policy makers, it was felt particularly important to understand whether the CHWs would be able to accommodate MOMI activities in their usual tasks.

"I think we need some more time so that we can be able to make a concrete assessment because he really has other activities, he has the part of malaria, promotion, prevention and much more, I confess that we need to sit down and make an evaluation and hear what are the constraints after adding another package in what are the daily tasks of an APES." (Policymaker₂)

Leadership

Facilitators

- At a higher level, there is already strong support from the provincial and national health authorities for the project to continue in the future. At the moment, for instance, the MOMI team and the MoH are outlining an exit strategy. There is a need to ensure that this intention is translated to practice at the end of the project if the activities are to be continued.
- Even if the MOMI ICRH-M is willing to continue supporting implementation of the interventions in the short term, increasing involvement and appropriation from the health authorities will be needed during this period of handover. Activities that will be required include providing supervisions, technical support and promoting accountability of the HFs' quality of care.
- All policy stakeholders interviewed agreed that the project should continue and that the conditions were there to do so. This kind of willingness and support from policy stakeholders is very important in order to ensure its sustainability.

"The most important thing about the project is continuity and I always say this, everything starts here, the ability to give continuity, it is not something that came only for five years, it is something that is here to stay"
(Policymaker₂)

- The involvement of the political and community local leaders was mentioned as the reason why the project achieved some success. This seems to justify why leadership is likely to be the key for sustainability.

"That is why things went well precisely because they began by involving the administrator himself and at community level, community actions i.e. the project envisaged that each site where it would be, it was important to involve local leaders of that area" and also the political actors at national level." (Policymaker₂)

- Both MOMI team and policy stakeholders considered that leadership is a crucial factor that has impacts on the continuation of the interventions. In particular, there is the need of a strong leadership from someone who is able to encourage HFWs to continue doing their job, and providing them with adequate support and back-up when something goes wrong.

"We do need someone who encourages HFWs to continue, so they also see the importance of it and the impact that it will have on the woman's or child's life. So in this case, we need ownership, leadership and accountability reinforcements" (MOMI Researcher₂)

"Because we also saw that HFWs need a lot of support, (...) someone who can motivate them to do something that in the end of the day will also make them feel happy about what they did, if they did bad or good but they feel that they have someone to support them, that will teach them on how to do and that always encourages to see the truth. Then they will work..." (MOMI Researcher₂)

"This [the continuation of activities] also depends heavily on district health services, if they start giving more encouragement, they [HFWs] can continue" (Policymaker₃)

Hindrances

- At the end of the PAB meeting in August 2015, the MoH representative suggested convening a working group to discuss how the interventions could continue after MOMI ends. However, by January 2016 this meeting had not yet taken place due to time constraints and getting the appropriate members in contact with each other. A stronger effort is needed from the MOMI team and the provincial health authorities in order to establish this group.
- Although there are strong signs of support at provincial and even national level, health policy makers asserted that unless structures at central level (that have to approve the project) were involved in MOMI, there might be some resistance to assuring its continuity.

"It has to be approved by the central level structures and it may happen that part of these structures may not have participate in the design, in part or the whole MOMI project hence the level of sensitivity may be different" (Policymaker₁)

"I think, MOMI components will continue within the existing programs, with the power of those tools for community staff (...) But the concept, I think it will die with MOMI, if it cannot sell it at national level. Because, if they want that to change then it has to be at national level" (Policymaker₄)

- It was also noted that the presence of the project implementers in the meetings at the MoH would be important to influence the decisions.

Effective collaboration (from stakeholders)

Facilitators

- MOMI ICRH-M, Provincial Directorate of Health, District health authorities and community level stakeholders were all involved in the design and implementation of the interventions. In general, it is considered that the project was well received and embraced at several levels.

"From the level of the facility, the doctor that is there, the district director... general medical technicians ... and the MCH nurses, and in the end the community itself, they are all motivated and excited about the project, they are all involved." (Policymaker₂)

"Well embraced by all of us at the provincial level not only at the district but also at the level of the facility" (Policymaker₂)

- Health policy makers considered that the positive changes and impact of MOMI concerning PPC were because of the involvement and dedication of all the actors involved. Effective collaboration and involvement were considered as important outcomes from the project, particularly at the community stakeholder level.

"The impact of the project is positive, not only by the numbers, but also for the delivery, dedication, involvement of everyone in this project and everyone knows that there is MOMI Project in Chiúta, there is no one who does not know of it" (Policymaker₂)

"What the project brought as benefit was the involvement of the community. In all health facilities now they do postpartum care... What we find of use from the project is the involvement with the community which we thought was very hard, especially the involvement of the traditional midwife, so all those incentives were positive" (Policymaker₃)

- The relationship and communication between MOMI team members and the district health authorities was considered good.
- The relationship between HFWs and CHWs was also good. One example of that is how CHWs used the outreach activities to solve health problems in the community (for instance, the immunizations). In case there was no outreach, they would refer to the facility.

Hindrances

- The collaboration between MOMI researchers and Provincial Health authorities was not effective in terms of putting the PPC issue in the agenda so that, for instance,

postpartum data could be analysed and translated into relevant information. Also, it was referred that there was more that could have been done in terms of sharing and discussing the project's findings with health authorities at provincial level.

"The project failed to strongly unite these sectors so that this issue of postpartum entered the agenda, so the data on the postpartum, for example, could be analysed and could be translated into information so that all these interventions could actually effectively seek for solutions or a new form of implementation" (MOMI Researcher₂)

- At HF level, there was a lack of communication between the different cadres and, in general, there was a lack of buy-in to the project from them.

"Above all, lacked ownership: [we missed that] the health centre staff feel that this is an intervention that comes to benefit the health of the community and they are key to make it happen" (MOMI Researcher₂)

- The stakeholders' workshop that occurred in September 2015 allowed recognition of some of the missed opportunities such as collaboration with other NGOs working with the communities.

"Seems that the project did not integrate the different actors at the community level... perhaps the project had not opted for cooperative work, and that we [NGOs] must join efforts so that at the end of the project we achieve good results" (Participatory evaluation workshop participant)

"Most likely the various organizations and stakeholders at community level are working with the same mothers and children, without coordination among the various actions at that level. And the same scenario happens at the facility, and there is a need to improve interaction and integration of various activities" (MOMI researcher at the Participatory Evaluation Workshop)

Understanding the community

Facilitators

- Both MOMI team members and policy stakeholders stressed the importance of having TBAs helping APEs reaching the women. TBAs have an important role in the community, since families trust them and they are closer to women. Therefore, it was important to put APEs, whom are almost all male, working with TBAs in order to overcome some difficulties raised by the, male health care provider – female patient/client relationship.

"... with great joy we have seen a strong connection between the APE and the TBA, they actually work together as a couple, so that connection I think we

have achieved. MOMI achieve this, which is something that is not very common to see, this connection between them [TBA and APEs], but we get to see this and more, the APE also benefits from the knowledge that the TBA has about postpartum women and also from the trust that the families have on TBAs. So that's great synergy" (MOMI Researcher₂)

"On one occasion an APE said that for him it was a little difficult to deal with women's issues, him being a man, what they normally do is that many APEs work in partnership with traditional birth attendants" (Policymaker₁)

Hindrances

- Regarding intervention 2, it was noticed that women do not accept IUD insertion very often and are more likely to accept implants or Depo-Provera injections. There are fears, misconceptions and taboos around having something strange in their bodies, especially in their intimate parts. This was a barrier to the immediate PP IUD insertion intervention. One aspect of acceptability of this method was also to involve partners in the decision to use an IUD for contraception.

"The implant has had more acceptance in relation to IUD because the implant is something that is there for once, the IUD is there but I think it is due to the place where it is inserted and there is a lot of talking, taboos, and many beliefs about it..." (Policymaker₁)

"The importance of talking to their partners in order to accept the idea about the positive side of IUD" (Policymaker₁)

Staff involvement

Facilitators

- At community and HF level the staff was involved through training and supervision visits. At HF, MCH nurses were particularly involved in the beginning. However, afterwards there was also the need to involve others technicians working at the HF to fully implement the integration of maternal PPC in child clinics.
- At community level, TBAs and APEs were involved in the work at the community, identifying risk signs, follow-up during the PP period and referrals to the HF (for PPC consultation, child vaccination or when a risk sign was identified). It seems clear that APEs and TBAs understood the importance to PPC and that it is part of their work. The work developed at community level was felt to be very important in the sensitization of women to the importance of PPC.

"Hiii ... They cannot stop, because they are the ones that help sensitize communities, there are a lot of communities that are far from the health centre, and they get to community homes with information. (...) The population is sensitized yes, things have greatly improved, but more work needs to be done because matrons [TBAs] still have influence in the community, only when they are unable is when they send to the hospital." (HFW₈, Screening sector)

Hindrances

- In general, at the HF, there were no clear signs that HFWs have understood the importance of PPC and have translated it into practice. This is also a significant hindrance because the attitudes of HFWs towards PPC influence women's perception of the importance of PPC.

"Although they [HFWs] say that it was very important, but I speak based on what I saw in action ... No, it was not, they start to realize that something is important, but could not show it and implement it." (MOMI Researcher₂)

"The woman will be convinced by the health worker so if the health worker are convinced then everything will continue well after" (MOMI Researcher₁)

- HFWs lacked "buy-in" to the project.
"Above all, it lacked ownership: [it lacked that] the health centre staff feel that this is an intervention that comes to benefit the health of the community and they are key to make it happen" (MOMI Researcher₂)
- High turnover, understaffing and the lack of specific MOMI training for new HFWs.

Resources and funding

Facilitators

- The financial resources (or lack of them) are not the main barrier to the continuation of MOMI activities. From the view of policy stakeholders, the project tools and instruments are already in place; hence it does not need a lot of financial resources in order to continue.

"Because it does not involve many resources, people are not receiving money... There is no financial incentive, there were training sessions (...) so I do not see any problem in the continuity of the project and it will not stop." (Policymaker₂)

"Yes, in principle yes, since we already have the tools, we have the instruments, I think so, we can continue." (Policymaker₅)

- Regarding specific interventions such as the use of the checklist, for instance, no additional financial resources are needed aside from printing which would not be a great significance for the district. The same with FP methods that are distributed for free by the MoH.

"I do not see any cost related to the project, but in future we will have to assume, especially in the event that the project is approved, we continue with filling-in of the checklist and that would be under district services, acquisition of reams, photocopy due to filling-in" (Policymaker₁)

"I think it has legs to walk on its own, because if we are to look at, this project, the exact activity of MOMI project is not a very costly activity because family planning methods are already distributed for free of charge and are available in all health facilities" (Policymaker₁)

- There are plans at provincial level to train more TBAs and the plan for 2016 includes non-financial incentives to motivate them.

Hindrances

- Even though many consider that there is no need for a large investment, the source of funds could prevent the continuation of the activities and the ways in which the MoH and donors choose to prioritise this versus other issues. Some major donors push the ministry in particular directions, which could be a barrier.
- The number of APEs is still insufficient to cover the needs. New APEs would be needed, but since they have salaries, their recruitment depends on the financial resources available for that purpose.

Intervention responsiveness

Facilitators

- The project was not static but responsive to the needs of the community and HFs. There were some adaptations to the project (increased supervisions, trainings and support) to meet identified needs to improve the implementation of the activities.

"Then the project underwent some adaptation to best be implemented"
(MOMI Researcher₂)

- The checklists were changed in order to meet the needs in the field better after some difficulties were identified during the assessment as part of the supervision visits.

"The first version of the checklist was changed because we had a meeting with the service providers and we saw that in filling-out there were some things that needed to be added or removed (...) according to practice" (Policymaker₁)

Hindrances

- The use of checklists will only continue if the way they are being used changes. They are helpful, but will not work if they remain as an additional piece of paper that the HFWs have to fill rather than transforming them into a manual, wall poster or as an item that forms part of the official registries.

Demonstrating results

Hindrances

- The district level authorities will need evidence to show that MOMI activities deserve to be continued.

"Also at the level of the province or the district, they [MOMI researchers] must explain and show evidence, MOMI project, its results, maybe it can help, to continue" (Policymaker₁)

"I just hope they can share the results of MOMI, after that an effort can be made not only to share at the province level but that we can push for the province to present these results at national level. There are several meetings, various mechanisms that the province knows these mechanisms in order to present, because if this is not done, then work has been done in vain ... Well, the communities will have benefited from the actions during the implementation period, but after that because it happens... there is no follow-up. It is complicated, it is a lot of investment to be lost" (MOMI Researcher₁)

- However, all stakeholders seemed concerned about the lack of good quantitative records and lack of evidence to provide a good picture of what happened at HFs and communities. There is no will to report good quality data at HFs. Indeed, there is a culture of hiding some data due to the fact that reporting poor indicators (which are real) may consider them incompetent. See also results in section 6.6.

"They will have to admit the importance of having real data, because we have data that is politically correct. So this inability ... the health centre does not want to take because it is admitted to be a problem. The district did not want to admit, because it also takes it as a problem. The province also does not want to show, greater morbidity and maternal mortality. So this is a problem, which is itself an effect... I mean it is an escalating effect." (MOMI Researcher₂)

“The more trouble they report; they will be called as if they were incompetent. Then it is easier to hide problems” (MOMI Researcher₂)

Community ownership

Facilitators

- PPC has been adopted and integrated by the communities. This ownership increases the probability that the activities to continue at community level.
- When there is a MOMI trained TBA available they were working together with APEs and both started giving importance to PPC and including MOMI activities in their daily work. APEs and TBAs have proven that they are capable of easily carrying out the interventions and continue with the activities. Since some communities are very distant from HFs and they are the ones that are closer and women trust them, their work is very important.
- At community level it was noticed that women are now more aware of the need of PPC and of FP methods and are demanding them. APEs anticipated that women will probably continue to do so even if their visits stop because now they know the importance of PPC.

“When we talk to them, they understand, they accept what we tell them and they take it as important.” (APE₆)

“I: If you stop now with this checklist, do you think people will continue going to the health center?”

R: Yes, they will continue.

I: Why?

R: They are now used [visiting the HF].

I: So you think the work is effective?

R: Yes.

I: Why are you saying that?

R: Because I normally see a lot of mothers going to the health unit.

I: So if this checklist stops today or not, they will continue going to the health center?

R: Yes.” (APE₇)

“In my view, yes, they will continue because they have already been informed of the advantages of doing everything in the hospital, they have seen many changes, and are used to that” (APE₃)

Inclusion of the intervention in the package of services provided

Facilitators

- The interventions were aligned with the national MCH policies (e.g. long term FP methods and the one-stop-shop intervention) which was a fundamental reason that they were chosen

"So these are part... these activities are also part of the national health system plan but I believe they happened in parallel" (MOMI Researcher₂)

"MOMI interventions always were based on the health ministry's policies, I think they were well adjusted" (Policymaker₅)

"Improve women's health by reducing more maternal and infant mortality rates... is a top priority, it is priority number one, basically, government five-year plan" (Policymaker₂)

- Policy stakeholders believed that since it has been recognized that there has been little attention to date on PPC, the five-year plan is likely to include it.

Perceived benefits

Facilitators

- Several positive outcomes were referred by health policy makers as a result from the interventions:
 - higher coverage of PP IUD insertion, higher awareness and decreased missed opportunities to provide care to women;
 - the use of checklist is helpful for the nurses' job;
 - the integration of services is seen as something positive by the mothers, since they only have to go to the HF once and the nurses are also very motivated to provide care this way. There was no evidence of the nurses' motivation during the case studies.

"There is a lot of improvement on family planning, integration, the one-stop approach that is the integration of women and child consultation to prevent the women from making multiple queues when they go to the facility, this is very good. Almost all women were very pleased because it reduced overload, a woman enters at once she is attended to, the child is attended to, the issue of checklist has facilitated to detect some danger signs that these women have" (Policymaker₂)

"Chiúta has advanced more, on family planning, Chiúta has also progressed more, interventions on inserting of postpartum IUD itself, Chiúta has advanced much more" (Policymaker₃)

"The introduction of checklists, this has improved to a great extent our day to day work, especially in the peripheral health facilities... The APEs had a rather qualitative increase in diagnosing pathologies (...) all this has led to the improvement of certain indicators, especially postpartum care indicators at the level of Chiúta district" (Policymaker₁)

"The nurses are highly motivated by this strategy... the users are also very satisfied because they only come once" (Policymaker₂)

- The benefits of the interventions were also recognized by the communities.
"Most [women] will continue, because they are seeing the benefits of this program and how the program is." (APE₂)

Commitment

Facilitators

- The APEs, in particular, showed a high level of commitment with their duties and responsibilities with the health of the community. Although MOMI activities were not the focus of their usual activities, they have implemented the project interventions even with all the difficult conditions. For instance, they continued their activities even while they were not receiving their wages from the government for months.

8.10 Replicability of MOMI interventions in Mozambique

Identification of the core components

The inclusion of MOMI interventions in the MoH policies, its plan of action and budget is a determinant of their replicability. MOMI interventions in Chiúta are seen as pilot interventions and it seems that more time and quantitative results are needed from the interventions implemented by MOMI (not only in Mozambique but also in other countries) to evaluate their effectiveness.

"R: It has to be included in the national policies because it will be for the whole country."

I: So if the national level assumes that, as something that should happen, it will facilitate...

R: At least it will be harmonized, it will use the same language, if there is something easily inserted, or that does not get into conflict with it, there you can have a chance, but the best thing is that it simply has to appear as a national policy.” (Policymaker₄)

“We are looking forward to see the final results so that we can share, not only with other districts but also at the level of the Ministry” (Policymaker₂)

The most important issues to consider during the replication of the interventions are the training and education needs, availability of the resources needed for the interventions (IUDs and all logistics) and the involvement of men.

“I think the necessary factors are training of people, we should continue to educate people regarding that package we had here, postpartum, checklist and encourage the community” (Policymaker₅)

Adaptation vs. Fidelity

Since two of the interventions were already part of the national plan, they could very easily be replicated without a lot of costs. PPC is not a specific problem of the district of Chiúta but the process of replication needs to take into account the geographical characteristics. For instance, there are some differences in the access to care among rural and urban areas in Chiúta:

“If they come for delivery at the health facility they would prefer to have all the services in one place” (MOMI Researcher₁)

But:

“If you’re living in the big city where services are available and you have more choice also, yeah because the effect of limited choices for a woman in the field it’s also a factor that influence service delivery” (MOMI Researcher₁)

In the case of replicating the checklists, MOMI team members and policy stakeholders agreed that they could be scaled-up if they are transformed into something with greater utility (for instance, not a separate piece of paper).

“The checklist as a tool I do not see much replicability and acceptance, but as a flowchart, as an algorithm that is on the wall or that comes within a process file... but inside something other than a paper, a separated sheet of paper, I also see that they give importance to the checklist” (MOMI Researcher₂)

Community ownership

There is a political will (at a highest level) to disseminate the project to other districts.

"In the last meeting we had with MOMI the national director for women's and child health liked it and saw that the implementation of MOMI in Chiúta district is a national example to be expanded to the other districts"
(Policymaker₅)

It is also clear that policy stakeholders are confident and enthusiastic with the possibility of scaling up the activities.

"I am anxious to scale it to the whole district first and I am also anxious that the ministry should embrace this project as it can be useful for the whole country" (Policymaker₂)

As previously said, at community level, there are also signs of appropriation of the project by APEs and TBAs, who have proven to be capable of easily carrying out the interventions.

8.11 MOMI Exit Strategies

8.11.1 Exit Strategies in Burkina Faso

Plans/Strategies for exit of MOMI project

- During the first following months after the end of MOMI, the IRSS team will continue to support the supervision of PPC activities and will do this in cooperation with the district health management team. The supervisions of primary health care system is still weakly organised and implemented at district level. HF's are not presently being supervised with the desired frequency (twice a year). This cooperation was discussed with the district team at the PAB meeting of 15 January 2016.
- The IRSS team will also look, discuss and lobby to the possibility of integrating PPC activities in the district annual action plan.
- The IRSS team has the expectation that AVs will be able to continue their work initiated by MOMI in the frame of the newly implemented government CHWs programme. This was also confirmed during the field visit in January 2016 by the Health authorities through the regional health director. Contradictorily to this, Kaya's District Chief Doctor stated that it will not be possible to have MOMI AVs selected as female CHW in the

frame of this new CHWs programme. The MCD stated that it would be the task of each health facility to continue motivating the AVs individually after the end of MOMI. It was not possible to draw a final conclusion on this issue, but it was the perception of the MOMI project coordination and local MOMI researchers that the chances that the new CHWs programme would be rolled-out soon were very slim.

- There are plans by UNICEF to start working with the government to reduce PP haemorrhage and sepsis.
- In the present action plan there is nothing specific on PPC (which could hinder the continuation of the by MOMI initiated activities).

Stakeholders involved with the exit strategies plans

- The previous strategies were discussed during the Participatory Stakeholders Workshop.
- This was also the main agenda point at the PAB meeting on 15th January 2016.
- The exit strategy and its measures will also be discussed at individual level by each stakeholder or PAB member with his team.

Expectations regarding the plans put in place

- The IRSS team expects that some of the strategies, activities, interventions and ideas introduced by MOMI will remain after the end of the project.
- The high staff turnover at health facility and at district health management team level in Kaya district is a problem in the frame of sustainability of MOMI activities. This is even a bigger problem in Kaya, more than in other districts of Burkina Faso, because of its proximity to the capital Ouagadougou.
- The fact that IRSS still has other project running in Kaya district (e.g. KADESS) will positively affect the sustainability of MOMI activities.

8.11.2 Exit Strategies in Kenya

Plans/Strategies for exit of MOMI project

- The ICRH-K team planned a phase-over approach, which was embedded in intervention implementation. During the implementation, an emphasis was placed on institutional capacity building of facility-based health workers and community health workers. Trainings, sensitizations, supportive supervision activities were conducted either in close

collaboration with or entirely by Matuga sub-county health administrators. In this way, the ICRH-K team envisions that these activities will continue even when MOMI project resources are unavailable.

- The training curriculum and supervision checklist for MOMI implementation were obtained from the MoH and are currently in the possession of Matuga sub-county health administration. The monitoring data was collected from the Ministry's service registers and will continue being available to the health administration. The same approach was used for the community activities where the MOMI project only conducted initial training of CHWs in conjunction with the Kwale county health promotion officer and local CHEWs. The CHEWs were also part of the supportive supervision activities and ICRH-K team envisions that these will continue even after the project close-out.
- The ICRH-K team provided, in the frame of MOMI, the CHWs with a structured format to conduct the dialogues and envisions that this will continue after the project close-out, since CHWs are expected to conduct dialogue sessions as part of their routine activities.

Stakeholders involved with the exit strategies plans

- Preliminary discussions with the Matuga sub-county health administration led by the medical officer of health (Dr. Kinyua) were taken.
- The exit strategy was also discussed during the Kwale county health stakeholders' forum where the ICRH-K got ideas on which health stakeholders/NGOs are currently operational in Matuga and how they will continue with activities aimed at improving maternal and child health using facility and community-based approaches (even though none was specific for postpartum care).
- During the Participatory Evaluation Workshop, the Kwale county health administration was adequately represented by the director (Dr. El-busaidy) and the health promotion officer (Mr. Baya), who are also members of the MOMI Policy Advisory Board.
- There were plans to discuss the project's exit strategy with the Kwale County chief officer of health (Dr. Mwaleso Kishindo) in January 2016. This would happen before the end on the project in order to get his input. However, he had been newly recruited and had not been yet actively engaged in the project.

Expectations regarding the plans put in place

- The ICRH-K expects that, based on this plan, most of the project's activities will be adopted by the local health system in Matuga. This is due to the fact that they are not absolutely labour or resource-intensive and that there is capacity installed in the local health administration to conduct future sensitization sessions, regular supportive supervision activities and to ensure that CHWs also perform their activities accordingly.

8.11.3 Exit Strategies in Malawi

Plans/Strategies for exit of MOMI project

- The PACHI team plans to have PPC mentoring and coaching integrated into routine supervision of the Ntchisi district health management team.
- The team also plans to include the community interventions (postpartum home visits) in the community based MNH program of the district health office.

Stakeholders involved with the exit strategies plans

- The previous exit strategy will be discussed with the Ntchisi district health management team.

Expectations regarding the plans put in place

- The PACHI team expects that the Ntchisi district health office will be able to sustain the PPC interventions by integrating them within their routine supportive supervision program.

8.11.4 Exit Strategies in Mozambique

Plans/Strategies for exit of MOMI project

- The ICRH-M team had been analysing exit strategies to be finished in January through meetings with the Provincial Health Department (DPS) and the MoH. The proposal includes:
 - 1. Revision and adaptation of model and tools implemented in Chiúta** with the Tete DPS, MoH, UNICEF and other partners to be then piloted in Chiuta district.
 - 2. Replication of PPC package in other three districts and continuation of implementation in Chiúta.** This package includes:
 - Training of health professionals

- Training of CHWs
- In-service training, monitoring, supervision, technical support and coordination targeted to the peripheral health facilities and community health providers
- Analysis of acceptability and replicability of package

3. Conducting research on the following topics:

- Barriers and facilitators of referral of newborns and new mothers
- Acceptability of different profiles of CHWs
- Barriers to the uptake of postpartum contraception

Stakeholders involved with the exit strategies plans

The exit strategies have been discussed with the MoH, the Tete DPS, the Distrital Directorate of Health and other provincial and national partners, such as UNICEF, who is a potential donor.

Expectations regarding the plans put in place

- The ICRH-M team hopes that the MOMI model will be refined based on the final MOMI evaluation report and based on the study team's experience so that it can be replicated in other districts.
- After two to three years of implementation and replication of the MOMI refined model, the ICRH-M team hopes that it will be taken up by the MoH and extended to the rest of Tete province and to another province.
- After that, the ICRH-M hopes that the MOMI refined model will serve as a standard for postpartum/postnatal care of mother and baby at community and health facility level.
- ICRH-M also hopes to use the MOMI findings to dialogue with the MoH on quality of care and to develop interventions that focus on addressing fragilities of the health system and the consequences for quality of care.

8.12 Discussion

We draw a comparison between the factors that facilitate or hinder sustainability in the four countries. This comparison was made in three levels of relevance, the most relevant factors were those that were more often referred and that interviewees seemed to give

more importance and the least relevant were the ones that did not emerge at all countries and that were less often referred. This comparison allows us to identify similarities between countries and specificities of each country.

Sustainability

The most relevant factors:

- The leadership was considered one of the most relevant factors for the interventions to continue in all the countries. The political will to continue the activities and the engagement of policy stakeholders is fundamental to ensure the sustainability of the interventions.
- The involvement of the staff is another relevant factor for the sustainability of the project. The need for more knowledge, skills and capacity building was met through training (with the exception of Malawi). The skills acquired through training are likely to remain and there is a general belief that the HFWs will not stop doing their job. However, such skills need to be updated and PPC must be part of new HFWs training.
- Resources and funding play a crucial role and they can have an impact on the continuity of the interventions, especially at community level and rural HFs. This is particularly due to the need of more HFWs and their recruitment being dependent on the resources available. However, the financial resources are not the main barrier to the continuation of the activities. When everything is already in place, there is not the need of financial investments to ensure that the interventions are sustainable. However, there were problems during the implementation, such as the lack of staff and frequent stock outs of the medical disposals that are needed to deliver PPC. It is expected that these problems remain which hinders sustainability.
- With the exception of Burkina Faso, the implementation duration was considered a relevant factor. In Kenya, Malawi and Mozambique, the short period of implementation was considered a main hindrance for the sustainability of the interventions.

Other relevant factors:

- Effective collaboration: in general, there was a great involvement and support from all the stakeholders. However, the collaboration from policy stakeholders in Malawi and between MOMI researchers and Provincial Health authorities in Mozambique did not reach all of its potential.

- Understanding the community: the involvement of the community was considered essential by the different stakeholders. Gender plays an important role at community level and there is the need to involve men in order to overcome fears, misconceptions and taboos and, consequently, ensure the continuity of the activities.
- The demonstration of results: the promising results need to be communicated and demonstrated at national level. By showing the benefits of the interventions, their sustainability will be easier. However, there is a problem with the lack of good records and accountability in Kenya, Malawi and Mozambique.
- Community ownership: the adoption of PPC by the communities increases the probability of the activities to endure. In Mozambique, Burkina Faso and Kenya, women are now more aware of the importance of PPC and PPFP and that will probably continue even if CHWs' visits stop. However, in general, CHWs have proven they are capable of continuing with the activities.
- Commitment: In Mozambique and Burkina Faso, the CHWs showed a high level of commitment with the health of the community.
- Including the intervention in the package of services provided: since the interventions were designed to not be new to the health system and were aligned with its national policies and priorities, they are more likely to continue.

Least relevant factors:

- Simplicity: if the interventions are easy to implement, they will easily continue. This factor did not emerge in all countries as relevant.
- Intervention responsiveness: In general, the project reacted to the needs of the community and HFs in order to improve the implementation of the activities and, consequently, their sustainability.
- Perceived benefits: there were already positive outcomes highlighted by all stakeholders, which can be seen as a reason to continue with the activities.

Replicability

Identification of core components

- In general, the alignment of the activities with the national guidelines allows their replicability. The national awareness regarding the need of PPC is essential.
- The sensitization of stakeholders concerning PPC is fundamental to scale up the activities. The involvement of men is particularly important in this regard.
- Training and education on PPC are also very important elements (namely the reinforcement of HFWs training).
- The need to follow-up the women at community level and to have more AVs conducting their activities may facilitate the replication of the activities.

Adaptation vs. fidelity

- The replicability of the interventions depends on the existing infrastructures and characteristics of the countries. There is the need, for instance, to take into consideration the geographical and cultural characteristics between different regions.
- The activities should be standardized so they can be disseminated nationally.

Attending to process

- The implementation of MOMI and the knowledge of what worked and did not work may be used as a lesson when replicating the activities. For instance, in order to replicate the use of checklists, they must be simplified so the HFWs spend less time filling them out. There is also the need of proper planning in order to implement the activities timely.
- As previously mentioned, it is important to consider the geographical differences (namely between rural and urban settings) and how they may lead to different outcomes in terms of replicability.

Community support

- The participation and involvement of all the stakeholders and, in particular, the communities, is essential for the replication of the interventions. As long as the project is owned and appropriated by the community and the CHWs do their work, the activities can be replicated.

Role of the staff

- This is one of the most important factors when analysing the replicability of the interventions, since this will depend on the staff in charge.

- The role of AVs must be redefined and their motivation should be taken into consideration so they are able to replicate PPC interventions.
- It is important to attend to the differences in the number of staff, since it is easier to replicate the activities when the number of staff is higher.

Limitations

- There were some concerns with the quality of the data collected. Sometimes, the answers from the participants may have been influenced by the way the questions were made by the interviewee.
- Social desirability: the participants' discourse sometimes portrayed an idealistic vision of reality.

8.13 Conclusions

As facilitators of sustainability

- The activities must be owned by and included in the plans of the local health authorities. A strong leadership at higher hierarchical level emerged as fundamental to guarantee support and endorsement of activities;
- The effective collaboration among stakeholders was deemed as very important to the success of interventions and to enable sustainability;
- Limited financial resources are expected to continue the activities, as a result of the MOMI strategy of making use of the existing resources;
- Training and supervision were seen as an opportunity to build capacity in the HFWs and in HFs. By increasing skills, health workers become more likely to accordingly provide better quality care;
- High motivation at community level to continue the focus on PPC, mainly in Burkina Faso and Mozambique;
- In general, there is a perception of women empowerment: the need for PPC was interiorised and the demand for it will continue.

As hindrances of sustainability

- The district and/or national health authorities need to address the problem of high staff turnover, understaffing and stock outs;

- Lack of continued attention and focus on PPC from health authorities. Concerns were raised on sustaining it;
- Short period of implementation, mainly in Malawi;
- Lack of good quality routine data to provide a valid picture of the reality.

Replicability

- In general, one can be confident that opportunities exist to scale up the interventions using the MOMI approach. In particular, the involvement of the stakeholders from inception, often referred as very important, strengthens such belief.
- Insufficient attention to the PPC is a national issue but in all countries the need for context specific interventions emerged as important.

Chapter 9 – Conclusions

9.1 Evaluation of MOMI

In sub-Saharan Africa, nearly 50% of maternal deaths and about 40% of neonatal deaths occur within the first 24 hours of childbirth. However, there has been a lack of attention given to the postpartum period. Postpartum care refers to care of the mother-infant dyad from the period immediately after the birth of the baby up to six weeks (42 days) after birth and can be extended up to 1 year after birth. Although the pattern of postpartum mortality and morbidity is clear, the essential package of services to support women in the first year after childbirth is poorly defined and the optimum service delivery configuration remains unclear. The MOMI study intended to improve maternal and newborn health through a focus on the postpartum period, adopting context-specific strategies to strengthen health care delivery and services at both facility and community level in four sub-Saharan countries.

The project was implemented in Burkina Faso, Kenya, Malawi and Mozambique by a consortium of five African and three European partners. In Burkina, the study was conducted in Kaya health district, in Kenya it was in Matuga constituency of Kwale district, in Malawi it was in Ntchisi district and in Mozambique it was in Chiúta district of Tete province. The primary objective of the MOMI study was to understand how integrating service delivery and strengthening health systems could improve the uptake and delivery of evidence-informed postpartum care both in the community and health facilities. The nature of the interventions themselves and the contexts within which they were implemented were complex requiring an evaluation strategy (rather than a single research method). The evaluation strategy thus, consisted of three parts: modelling impact evaluation, measurement of implementation strength and analysis of programme theory using a realist evaluation approach.

We began with an initial policy analysis (WP 2) followed by a situational analysis (WP 3) to identify the gaps in implementation of the policy guidelines. The key gaps identified were that there was a lack of standardised and organised provision of care across all the sites as well as a general lack of awareness about the importance of postpartum care among health workers. PPC was not fully and routinely integrated into health services in the intervention

settings. There was a general lack of capacity in the health facilities to manage obstetric complications.

Interventions were defined and designed based on the data and information obtained through the initial analyses (WP 2 and WP 3). They were discussed at sequential meetings of relevant stakeholders in each country, held especially for this purpose and the final packages of PPC interventions that should be implemented at each study site were agreed upon (WP 4). Selection criteria used by the stakeholders to decide on the final package of context specific interventions included feasibility (regarding finances, human resources and the availability of infrastructure, medical equipment and drugs), effectiveness, acceptability and sustainability. This led to the development of a stakeholder-led, context-specific package of interventions targeting newborns and women in the postpartum period that would be delivered through a combined facility and community based approach. The package of activities varied across the sites but all sites had the following interventions in common: they focussed on upgrading immediate postpartum care; all sites but Kenya also worked on integrating routine postpartum care with infant services such as vaccination; increasing uptake of postpartum family planning was another common intervention across the sites; and community interventions varied across the sites but their primary objective was to strengthen the linkage between the community and the formal health system. Implementation strength of those interventions – measured in terms of the dose, duration, intensity, specificity and fidelity – varied across the sites.

Despite wide variation in intervention choice, design and delivery across settings and differences within the contexts and systems within which they were implemented there are four broad middle range theories – “Buzz Theory”, “Bridging Theory”, “Motivation by Accountabilities” and “Together is Stronger” – that appear to underpin whether or not the interventions implemented had an impact at the point of service delivery.

Sustainability and replicability of the interventions was an integral part of the project and was considered in the analysis of the project. Key sustainability factors identified were leadership, involvement of staff, resources and funding and the length of implementation, while the critical determinants of intervention replicability included identification of the appropriate core components, finding the balance between adaptation and fidelity, involvement of stakeholders and redefining the role of staff and their motivation.

9.2 Recommendations for policymakers and implementers

While countries are making substantial progress in maternal and newborn health to achieve their goals, further improvements can be achieved by implementing innovative interventions in the postpartum period. Strengthening health systems and integrating service delivery for the postpartum period offers potential for success.

Integration of service delivery requires re-organisation of care practices as well as human resources. Greater engagement and participation of the health systems leadership is necessary to bring about these changes. A whole systems approach to improvement needs to be taken into consideration rather than an intervention-focussed approach.

Increased flexibility in service provision roles are needed to encourage task sharing across different sectors such as maternal and child health to deliver truly integrated care.

Community engagement for postpartum care needs targeted interventions and investment of time and resources.

For implementers, engaging local stakeholders in the early intervention design period is innovative but it does not necessarily lead to greater ownership of the project. It can also be time-consuming. Nevertheless, stakeholder engagement is important and alternative strategies to increase local ownership of the intervention need to be explored.

Adequate investment in monitoring systems is also required to provide sufficiently regular, reliable and valid data to monitor progress in implementation of interventions in each facility and community. Such data is also required to underpin on-going evaluation efforts. The evaluation of complex interventions is also enabled via the concurrent use of a variety of approaches that can be used to corroborate each other, investigate potential mechanisms of impact, and explore the role of context and implementation strength on both intended and unintended outcomes and overall impact.

Broadening the scope of work of community health workers can provide a key resource for improving postpartum care by increasing belief in the value of proactive postpartum care within the community, increasing trust in formal health structures and facilitating access to routine postpartum care.

The forces of social cohesion have a powerful influence on healthcare behaviours. Investment in a critical mass of community actors is needed to diffuse postpartum healthcare messages.

Incentives and accountability systems for postpartum care can increase activity but indicators that take account of the quality of care provided are also needed.

Although there is evidence about what works to improve outcomes in the postpartum care, much more emphasis is needed on how these interventions can be adapted and implemented to ensure a contextual fit in practice.

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Appendices

Appendix 1 – Summary of interventions

1. Burkina Faso

Intervention	What	When	Where
TBAs in the community support mother and infant during the postpartum period	The TBA will conduct three PPC home visits per women during the first year after birth.	Three visits: 1. Day 0-7 2. Week 6-8 3. Month 9-12	Communities
Enhance the delivery of immediate postpartum care in the health facilities with focus on the detection and management of postpartum haemorrhage and sepsis		Day 0	Health facilities
Integration of maternal and infant services in the postpartum period	Following PPC for the mother and PPC for the newborn/infant (including vaccination of newborn/infant) will be integrated in the same visit: •	PPC for mother and newborn/infant provided at three occasions: 1. Day 6-10: 2. Week 6-8 3. Month 9	Health facilities

2. Kenya

Intervention	What	When	Where
<p>1. <u>Strengthening immediate postpartum care (PPC)</u> for mother and newborn by <u>upgrading knowledge and skills</u> of facility and community based health workers on detection and management of common maternal and neonatal complications occurring within 48 hours of delivery, promotion of early breastfeeding, family planning (FP) uptake, kangaroo, cord and skin care and by <u>providing home visits</u>.</p>	<p>10 targeted health facilities with functional community units offering postpartum care for mother and newborn as per new national guidelines.</p> <p>The community health worker (CHW) conduct a home visit to those women who delivered at home and those who were discharged before 24 hours PP.</p>	<p>1st 48 hours after delivery</p>	<p>Health facility and Communities</p>
<p>2. Increase knowledge on and uptake of <u>postpartum family planning (PPFP)</u> during the first year after delivery using the dialogue model at community and facility level.</p>	<p>Dialogue model focuses on interpersonal and group dialogue. The dialogue model of communication for social change by Rockefeller Foundation will be adapted to promote uptake of PPFP in the community*</p>	<p>The immediate postpartum period up to 1 year after delivery, focussing on promoting uptake of PPFP beyond the 6 weeks traditional period.</p> <p>The immediate period will focus on promoting postpartum intrauterine device (IUD) insertion following caesarean section and normal delivery</p>	<p>Health facilities and communities</p>

3. Malawi

Intervention	What	When	Where
1. <u>Strengthen clinical management</u> of post-partum care during first 48 hours, at 6 weeks and at 3, 6 and 9 months	PPC clinical management will be strengthened through mentoring and supervision for medical assistants, nurses and clinical officers working in 12 health facilities in Ntchisi	<ol style="list-style-type: none"> 1. First 48 hours 2. Week 6 3. Month 3 4. Month 6 5. Month 9 	In the district hospital and 11 health centres in Ntchisi district
2. <u>Increase utilization of postpartum family planning</u> for women aged 15-49 through increasing awareness on PPFP in Ntchisi district	Increase PPFP utilization through provision of PPFP information by: <ul style="list-style-type: none"> • Health workers providing PPFP counselling to both men and women during their visits to ANC and outreach clinics • HSAs and male champions providing men with PPFP information at health facility and outreach clinics (whenever men escort women to clinics) • Male champions to provide PPFP information to men in groups and during home visits in communities 	During clinic days as women receive PPC and PPFP services In ANC and mobile clinics During monthly male groups meetings	Outreach clinics Health facilities Male group meetings (community) Home visits by male champions (community)
3. <u>Strengthen community postpartum care</u> management in Ntchisi district	Community volunteers conduct several home visits to provide care for mother and infant during pregnancy until month 5 PP (based on Maimwana volunteer and infant feeding model). •	Following visits are planned: <ol style="list-style-type: none"> 1. Early in the pregnancy 2. 3rd trimester pregnancy 3. Immediate after delivery 4. 3rd or 4th day after delivery 5. 1 month 6. 3 months 7. 5 months 	Home visits in community

4. Mozambique

Intervention	What	When	Where	Who
Mother and newborn postpartum risk assessment and management at community and facility level upgraded through improved Identification of mothers and newborns at risk and referral of mothers and newborns found to be at risk from community to health facility	<ul style="list-style-type: none"> • Use of COMMUNITY RISK ASSESSMENT TOOL (checklist) at two home visits to identify mothers and newborns at risk at postpartum period and • Referral of mothers and newborns identified being at risk from the community to the health facility 	Immediate up to 10 days postpartum	Communities	Existing APEs, TBAs, Mother groups
	<ul style="list-style-type: none"> • Use of COMMUNITY RISK ASSESSMENT TOOL (checklist) at one home visit to identify mothers and newborns at risk and • Referral of mothers and newborns identified being at risk from the community to the health facility. 	At 2 months	Communities	Existing APEs, TBAs, Mother groups
Monitoring and management of at-risk patients at facility level	<ul style="list-style-type: none"> • Use of FACILITY RISK ASSESSMENT TOOL to improve assessment, monitoring and management of at-risk patients at facility level (including referred home deliveries) and • Enhance timely referral (within 12 hours) of mothers and newborns identified being at-risk from peripheral HF (type 2) to Manje HF (type 1) 	Immediate up to 48 hours postpartum (for mothers who delivered at HF) and all first PP consultations of mothers delivered at home within the period of 1 year after delivery	Health facilities	MCH nurses
2. Scale-up access to and use of family planning methods through making immediate PP IUD insertion available at all district HFs	<ul style="list-style-type: none"> • Immediate PP IUD as FP method provided at all district HFs • Counselling on importance and advantages of immediate PP IUD insertion integrate in ANC consultation 	Immediate postpartum All ANC consultations and at delivery	Health Facilities	MCH nurses

Appendix 2 – Implementation Timelines of MOMI Interventions

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Abbreviations

ADC	Area Development Committee
APEs	Agentes Polivalentes Elementares
AV	Accoucheuse Villageoise
CBDAs	Community Based Drug Administrators
CHAI	Clinton Health Access Initiative
CHEW	Community Health Extension Worker
CHW	Community Health Worker
CORPs	Community Own Resource Persons
CSPS	Centre de Santé et de Promotion Sociale
CU	Community Unit
DH	District Hospital
DHO	District Health Office
DHMT	District Health Management Team
Disp	Dispensary
FP	Family Planning
FMUP	Faculdade de Medicina da Universidade do Porto (Portugal)
HC	Health Centre
HF	Health Facility
HSA	Health Surveillance Assistant
HW	Health Worker
ICRHK	International Centre for Reproductive Health Kenya (Kenya)
IUD	Intrauterine Device
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
MNCH	Maternal, Newborn and Child Health
MoH	Ministry of Health
MOMI	Missed Opportunities in Maternal and Infant Health
PACHI	Parent and Child Health Initiative (Malawi)
PP	Postpartum
PPC	Postpartum Care
PPFP	Postpartum Family Planning
STA	Sub-Traditional Authority
TA	Traditional Authority
TBA	Traditional Birth Attendant
VSLA	Village Saving and Loans Associations
WP	Work Package

1. Burkina Faso – Kaya District

Interventions implemented in 12 health facilities and 72 communities (table 1).

Table 1: Names MOMI intervention health facilities and communities, Burkina Faso

Health Facilities (CSPS)	Communities ¹
1. Basnére (rural)	1. Basnére 2. Tibtenga 3. Yangdo 4. Tifou 5. Baobokin 6. Roumtenga
2. Damesma (rural)	7. Damesma 8. Gantodogo 9. Irastenga 10. Goulgin 11. Toécé 12. Sian
3. Delga (rural)	13. Delga 14. Zandogo 15. Bakouta 16. Bandaga Peulh 17. Koutoula Yarcé
4. Kalambaogo (rural)	18. Kalambaogo 19. Sanrgo 20. Bangassé 21. Gnounoumba 22. Nongfair-bagré 23. Nongfair- mossi² 24. Konkin 25. Kankandé
5. Lebda (rural)	26. Lebda 27. Goema 28. Diassa 29. Rimkilga 30. Kamcé 31. Komsilga ³ 32. Toèguin
6. Namsigui (rural)	33. Namsigui 34. Oualga 35. Gah 36. Dapolgo 37. Pampa 38. Foura- Bissinogo
7. Napalgué (rural)	39. Napalgué 40. Bindogo 41. Gounghin 42. Harwin 43. Kougrin
8. Tangasgo (rural)	44. Tangasgo 45. Damané 46. Paspanga 47. Bisnogo

9. Secteur 1 (urban)	48. Secteur 1 49. Raïsm 50. Tanyiba 51. Kanrtenga 52. Koulogo 53. Secteur 2
10. Secteur 4 (urban)	54. Secteur 4 55. Sibougou 56. Silgkoom 57. Bangsom 58. Lélégcé 59. Moukadam 60. Kalwagdo
11. Secteur 6 (urban)	61. Secteur 6 62. Bissiga 63. Basbéréké 64. Silmiougou 65. Fanka 66. Konéan 67. Dondolé
12. Secteur 7 (urban)	68. Secteur 7 69. Secteur 3 70. Secteur 5 71. Zablo 72. Foulo

¹ In bold are the communities in which the CSPS is located, the communities mentioned under the bold title are those linked with the CSPS located in the 'bold' community. There is 1 female community health worker (accoucheuse villageoise (AV) also referred to as TBAs (traditional birth attendants)) per community.

² In red are the communities in which the trained AVs were not active during the project.

³ This community replace the older AV by a young AV who performs MOMI activities since May 2014 (the older AV was not active in implementing MOMI PPC services)

Three interventions are implemented in Burkina Faso. The tables below give for each of these interventions the implementation timeline (table 2 to 4).

Table 2: Intervention 1: Enhance the delivery of immediate postpartum care in the health facilities with focus on the detection and management of postpartum haemorrhage and sepsis

Date	Activity conducted as part of/supporting the intervention implementation
1. 10 Jul 2013	Preparatory meeting with health facility responsible, regional and district health care team
2. 15 Jul 2013	Preparatory meeting with immunisation and maternal health responsible
3. Sep 2013	Training of 18 facility HWs (health workers) on PPC (postpartum care)
4. 1 Oct 2013	Start intervention implementation
5. 2 – 9 Oct 2013	1 st supervision visit of all HFs (health facilities)
6. Dec 2013	Training of another 46 facility HWs (health workers) on PPC (postpartum care) (in total 64 HWs trained)
7. 20 Jan – 5 Feb 2014	2 nd supervision visit of all HFs
8. 20 Jan to 5 Feb 2014	Inform the facility HWs on the PPC work/activities provided by the AVs/TBAs by giving them a copy of the AVs/TBAs checklist and discuss the AVs/TBA tasks with them
9. 20 Jan to 5 Feb 2014	Development, distribution and explanation of use of PPC checklist for health facility workers (one format A4 and another format A3)
10. 31 Mar – 12 Apr 2014	3 rd supervision visit of all HFs
11. 16 May 2014	Distribution of 97 blouses (non-financial incentive) for facility health workers
12. 7 – 23 Jul 2014	4 th supervision visit of all HFs
13. 12 – 19 Oct 2014	5 th supervision visits of all HFs
14. 21 – 31 Dec 2014	6 th supervision visits of all HFs
15. 23 - 28 Mar 2015	HW training on MOMI project interventions (same training provided twice from 23 to 25 and from 26 to 28 March)
16. 26 and 28 Mar 2015	7 th supervision of all HFs – done in group as part of the training
17. 23 Mar to 7 Apr 2015	Base line data collection
18. 20 – 31 Jul 2015	8 th supervision visits of all HFs (included on-the-job anaemia awareness and training)
19. 2-7 Nov 2015	9 th supervision visits of all HFs (included integration of postpartum care services awareness and reinforcement)
20. 28 Jan 2016	Print T-shirt with MOMI project logo
21. 29 Jan 2016	MOMI results dissemination meeting for all MOMI facility health workers. Including the distribution of a MOMI T-shirt and a certificate of participation to all facility health workers

Table 3: Intervention 2: Integration of maternal and infant services in the postpartum period

Date	Activity conducted as part of/supporting the intervention implementation
1. 10 Jul 2013	Preparatory meeting with health facility responsible, regional and district health care team
2. 15 Jul 2013	Preparatory meeting with immunisation and maternal health responsible
3. 16 - 25 Jul 2013	Workshops with health workers in each facility to explain integrated services
4. 1 Oct 2013	Start intervention implementation
5. 2 - 9 Oct 2013	1 st supervision visit of all HFs (health facilities)
6. 20 Jan – 5 Feb 2014	2 nd supervision visit of all HFs
7. 20 Jan to 5 Feb 2014	Development, distribution and explanation of checklist for facility health workers to support the integration of PPC consultation for mothers in the infant/child and immunisation clinics.
8. 31 Mar – 12 Apr 2014	3 rd supervision visit of all HFs
9. 7 – 23 Jul 2014	4 th supervision visit of all HFs
10. 12 – 19 Oct 2014	5 th supervision visit of all HFs
11. 21 – 31 Dec 2014	6 th supervision visits of all HFs
12. 2 – 9 Jan 2015	Collection of monitoring indicators at health facilities (done every quarter by Abou – collection of data from health facility registers)
13. 23 - 28 Mar 2015	HW training on MOMI project interventions (same training provided twice from 23 to 25 and from 26 to 28 March)
14. 26 and 28 Mar 2015	7 th supervision of all HFs – done in group as part of the training above
15. 1 – 9 Jun 2015	Collection of monitoring indicators at health facilities (done every quarter by Abou – collection of data from health facility registers)
16. 20 – 31 Jul 2015	8 th supervision visits of all HFs (included integration awareness and reinforcement)
17. 2-7 Nov 2015	9 th supervision visits of all HFs (included integration of postpartum care services awareness and reinforcement)
18. 29 Jan 2016	MOMI results dissemination meeting for all MOMI facility health workers. Including the distribution of a MOMI T-shirt and a certificate of participation to all facility health workers

Table 4: Intervention 3: AVs/TBAs in the community support mother and infant during the postpartum period¹

Date	Activity conducted as part of/supporting the intervention implementation
1. 10 Jul 2013	Preparatory meeting with AV/TBA (is female community health worker) responsible, regional and district health care team
2. 12 - 14 Sep 2013	72 AVs/TBAs trained on PPC
3. 16 Sep 2013	Start implementation community MOMI intervention
4. 2 - 9 Oct 2013	1 st supervision visit of all AVs/TBAs
5. 15 - 26 Nov 2013	Information meetings with 262 community leaders. Community leaders were informed on the MOMI project and the work of AVs/TBAs in MOMI
6. 26 Nov 2013	Information meetings with 98 male community health workers (CHWs). CHWs were informed on the MOMI project and the work of AVs/TBAs in MOMI
7. 20 Jan - 5 Feb 2014	2 nd supervision visit of all AVs/TBAs
8. Jan - Feb 2014	Development, distribution and explanation of use of health education (HE) material (pictures) for AVs/TBAs
9. Jan - Feb 2014	Development, distribution and explanation of use of PPC checklist for AVs/TBAs
10. Mar - Apr 2014	Implementation of incentives system for AVs/TBAs (only non-financial incentives are provided through MOMI): distribution of 70 bags and overcoats among AVs/TBAs
11. 31 Mar - 12 Apr 2014	3 rd supervision visit of all AVs/TBAs
12. 16 May 2014	Implementation of incentives system for AVs/TBAs (only non-financial incentives are provided through MOMI): distribution of 70 bicycles among AVs/TBAs
13. Jul 2014	Development, distribution and explanation of use of ideogram (pictures) for TBAs to collect data regarding their activities
14. 7 - 23 Jul 2014	4 th supervision visit of all AVs/TBAs
15. 25 - 26 Aug 2014	Refresher training of AVs/TBAs on MOMI project interventions. 67 AVs/TBAs participated.
16. 12 - 19 Oct 2014	5 th supervision visit of all AVs/TBAs
17. 21 - 31 Dec 2014	6 th supervision visits of all AVs/TBAs
18. 21 - 31 Dec 2014	AVs/TBAs data collection through ideogram
19. 18 Apr 2015	7 th supervision of all HFs TBA – done in group
20. 1 - 8 Jun 2015	TBAs activities data collection through ideogram (pictures), card and MOMI register
21. 20 - 31 Jun 2015	8 th supervision visits of all HFs and linked AVs
19. 2 - 7 Nov 2015	9 th supervision visits of all HFs and linked AVs

20. 30 Jan 2016	MOMI results dissemination meeting for all MOMI AVs. Distribution of a certificate of participation to all AVs. The meeting included an AV champion ceremony and all AVs received a small bicycle maintenance incentive (to cover the costs of the maintenance they had at their bicycles received through MOMI).
21. 28 -31 Jan 2016	MOMI results dissemination among the community leaders

¹ Each community has 1 female and 1 male community health worker identified. The female community health worker is called AV (accoucheuse villageoise) or translated to the English term TBA (traditional birth attendant)

2. Kenya – Matuga Sub-County, Kwale County

Interventions implemented in 10 health facilities and 12 established community units (CUs)¹ (table 5).

Table 5: Names MOMI intervention health facilities and community units, Kenya

Health Facilities	Community Units ¹
1. Kwale DH (District Hospital)	1. Chitsanze CU (Kwale DH)
2. Tiwi HC (Health Centre)	2. Mwachema CU (Tiwi HC) Mkoyo CU (Tiwi HC) ²
3. Mkongani HC	3. Mkomba CU (Mkongani HC)
4. Kizibe Disp (Dispensary)	4. Kizibe CU (Kizibe Disp.)
5. Magodzoni Disp	5. Simkumbe CU (Magodzoni Disp.) ³
6. Matuga Disp	6. Matuga CU (Matuga Disp.) ³
7. Mazumalume Disp	7. Mazumalume CU (Mazumalume Disp.) ³
8. Mwaluphamba Disp	8. Tserezani CU (Mwaluphamba Disp.)
9. Vyongwani Disp	9. Vyocuta CU (Vyongwani Disp.) ³
10. Ngombeni Disp	10. Mtamazide CU (Ngombeni Disp.) ³ 11. 4Ms CU (Ngombeni Disp.)

¹ In brackets is the name of the HF to which the CU is linked

² In Aug 2014 this CU received training as per the national guidelines for CORPs (Community Own Resource Persons). This training was organised by ICRHK. The CU received no MOMI training (see table 6)

³ These are the CU with focus for the implementation of MOMI dialogue model sessions. Mtamazide CU (Ngombeni Disp.) and Matuga CU (Matuga Disp.) were added later as focus CU.

Two interventions are implemented in Kenya. The tables below give for each of these interventions the implementation timeline (table 6 and 7).

Table 6: Strengthening immediate postpartum care for mother and newborn by upgrading knowledge and skills of facility and community based health workers and by providing home visits

Date	Activity conducted as part of/supporting the intervention implementation
Health facility component	
1. 22 – 26 Jul 2013	18 facility health workers trained on PPC with emphasis on skills update on emergency obstetrics care. At the end of the training all participant received a copy of the recommended PPC guidelines and a certificate of attendance.
2. Sep 2013	Start implementation strengthening PPC at health facility level intervention

¹ **Community Units (CUs):** CUs are established as part of the community strategy of the Ministry of Health. Ideally each CU has approximately 1,000 households. It is aligned to administrative units (the sub-location) and is served by 50 community health workers (CHWs) with each serving approximately 20 households. Each CU is supervised by a community health extension worker (CHEW) who is a formal staff member of the primary healthcare facility to which the CU is linked. A CHEW is an employee of the ministry of health who received a formal health worker training. Each CU should consist of 50 trained CHWs, however over time some drop out leaving at present around 18 to 30 active CHWs per CU (situation in the MOMI CUs).

3. 16 -18 Oct 2013	1 st supportive supervision and mentorship visit. All 10 health facilities visited. Supervision done by Ms Esther Mwachiro (District Reproductive Health Nurse), Dr Vernon Mochache and Eunice Irungu.
4. 27 - 28 Nov 2013	2 nd supportive supervision and mentorship visit. All 10 facilities visited by Dr Vernon Mochache and Eunice Irungu. Wall charts for neonatal resuscitation distributed to the facilities.
5. 5 Feb 2014	Participate in data review and dissemination meeting organized by the Kwale county health management team. Participate to raise awareness on strengths and gaps in PPC.
6. 3 Mar 2014	MOMI team attended on invitation of the Kwale Director of Health a quarterly meeting on strategic planning and review. During the meeting, MOMI staff requested to include PPC data in the monthly data review meetings in order to increase focus on PPC.
7. 11 – 13 Mar 2014	3 rd supportive supervision and mentorship visit in all 10 health facilities by Dr H. Elb-Saidy (Director of Health, Kwale County), Dr Kevin Kinyua (DMOH), Mr Galole Dima (District public health Nurse), Juma Ahmad (Community liaisons officer, Matuga sub-county), Dr Vernon Mochache and Ms Eunice Irungu.
8. 27 Mar 2014	MOMI team attended Kwale Stakeholders Forum meeting organised by Kwale Director of Health. MOMI staff contributed to influence better PPC outcomes.
9. 9 – 11 Apr 2014	4 th supportive supervision and mentorship visit. All 10 health facilities supervised by Mr Galole Dima (district public health nurse), Vernon Mochache and Eunice Irungu.
10. 10 – 13 Jun 2014	5 th mentorship, supportive supervision and M&E visit by MOMI staff. All 10 health facilities visited.
11. 2 - 3 Sep 2014	9 newly posted facility health workers sensitized on PPC and MOMI interventions, emphasis on management of PPC, birth asphyxia, eclampsia and skills update
12. 4 Sep 2014	Participate in data review and dissemination meeting organized by the Kwale county health management team. Participate to inform and raise attention on strengths and gaps in PPC.
13. 10 - 12 Sep 2014	6 th supervision of intervention implementation (all 10 health facilities visited) by Vernon Mochache and attend a consultative meeting on the Kwale health sector strategic plan. MOMI monitoring data collected during this visit.
14. 24 Sep 2014	Vernon Mochache attended the Kwale health forum meeting in Kwale; a stakeholders meeting organised by the Kwale Ministry of health
15. 15 -18 Dec 2014	Supportive supervision and M&E visit by MOMI staff (Eunice). 4 facilities visited.
16. 14 Jan 2015	Supervision visit to four health facilities (Ngombeni (CHEW), Matuga (Nurse), Magodzoni (CHEW) and Mazumalume (Nurse)). Conducted by Eunice.
17. 21 – 22 Jan 2015	Attend a community activity at Matuga dispensary to supervise and support dialogue session during an out-reach activity
18. 24 – 27 Feb 2015	7 th supportive supervision visit and collection of monitoring data by Vernon Mochache and Dima Galole (district public health nurse). All health facilities visited
19. 12 Mar 2015	A meeting for all facility in-charges or their representatives and the CHEW. Overall activities, successes, challenges and progress of MOMI interventions were reviewed (Eunice). A refresher training on neonatal resuscitation to be conducted during the next meeting in May/June

20. 12 Mar 2015	Meeting and mentorship for use of picture for dialogue sessions with Matuga CHWs
21. 27 Mar 2015	Distribution of A3 coloured picture booklets for uptake of PPC services to 6 health facilities and their CHEWs by Eunice
22. 13 Apr 2015	Distribution of A3 coloured picture booklets to remaining 4 health facilities (Ng'ombeni dispensary, Tiw'i Rural health Centre, Matuga dispensary, Kwale sub-county hospital)
23. 13 - 17 Apr 2015	8 th supervision visit: supervise of intervention implementation in nine health facilities (Tiw HC was not supervised) by Mochache (ICRHK MOMI staff) and county community liaisons officer
24. 30 Apr 2015	Magodzoni dispensary: mentorship of the facility nurse on rearranging the delivery room to enhance emergencies management and newborn resuscitation
25. 1 May 2015	Supervision Kwale sub-county hospital: support the newly appointed labour ward nurse with setting up and organising newborn resuscitation at the labour ward
26. 12 Jul 2015	Review meeting with Galole Dima (sub-county public health nurse) to discuss progress of MOMI activities and PPC at Kwale sub-county hospital, and plan for meeting with health workers in-charge of the MOMI health facilities and CHEWs
27. 27 – 28 Jul 2015	Meeting with all health workers in-charge of MOMI health facilities. The meeting included refresher training on emergency obstetric and newborn care, with special attention on skill upgrading on maternal and newborn resuscitation. Training held at Kwale Health Resource Centre.
28. 21 Aug 2015	Kwale sub-county hospital supervision and neonatal resuscitation demonstration, with the district reproductive health nurse Galole Dima
29. 22 Aug 2015	Vyongwani dispensary supervision and neonatal resuscitation demonstration, with the district reproductive health nurse Galole Dima
30. 9 – 10 Sep 2015	Skills update on maternal and neonatal resuscitation and eclampsia management at Magodzoni dispensary, Matuga dispensary (one clinical officers and one nurse attended the skill training), and Mazumalume dispensary.
31. 15 – 16 Oct 2014	Kwale scientific conference. Capacity building for health care workers for writing abstracts, data analysis and presentation done. Vernon Mochache attended the conference. The conference participants were health care workers from Kwale county. MOMI organized part of the conference. Mochache made a presentation on MOMI data.
32. 14 – 17 Dec 2015	Supervision of previous recommendations made on set-up of labour wards in readiness for delivery, maternal and neonatal resuscitation at Vyongwani and Matuga dispensary and Kwale sub-county hospital. Done by Eunice and district public health nurse Mr Galole Dima
33. 28 – 31 Jan 2016	Skills review and mentorship on setting up labour ward for management of PPC, birth asphyxia, eclampsia, and maternal resuscitation at Kizibe, Mkongani and Mwaluphamba dispensaries.
Community component	
1. Aug – Sep 2013	547 CHWs trained/sensitized on PPC with emphasis on PP visits and referral for PPC within 48h. Certificates and name tags given to all participants.
2. 29 Aug 2013	Sensitization meeting for CHWs in Matuga CU on the reproductive health issues especially to inform CHWs to register all women in postpartum period and accompany them to the health facility. Event organized by the Matuga dispensary

3. 19 Sept 2013	Dialogue session on need for skilled delivery at health facilities conducted for a village in which the majority of deliveries are home deliveries (organised at Magodzoni dispensary)
4. 10 Oct 2013	Community dialogue on different reproductive health issues at Vyokuta CU. Event organized by CHEW from Vyogwani dispensary
5. 14 Nov 2013	TBAs/CHWs/Matuga staff – meeting with TBAs at Matuga dispensary to discuss ways to strengthen skilled delivery at health facility and postpartum care. High numbers of home delivery continue to be recorded.
6. 27 Nov 2013	Meeting to give feedback to the Vyokuta CU members on reproductive health issues especially on identification of postpartum mothers and refer them to the health facility. Meeting organized by the facility linked with Vyokuta CU and the CHEW
7. 28 Nov 2013	Mentorship visit to CHEWs on community dialogue sessions
8. Dec 2013	Start implementation strengthening PPC at community level intervention
9.	Supportive supervision of CHEWs is done by MOMI staff (together with district health staff) when they supervise the health facilities (see supervision visits mentioned under 'health facility component') Supervision of CHWs is done on a continuous basis by the CHEWs (CHEWs go to CU/villages for supervision) and staff from the office of District Public Health nurse (CHWs asked to come to health facility for this supervision). MOMI team members also supervise some of the CHWs.
10. 3 Dec 2013	Community dialogue held at Mwaluphamba, Tseretzani CU
11. 14 Feb 2014	Meeting organized by MOMI trained nurse for TBAs to discuss the need of skilled deliveries conducted health facilities this to increase number of skilled deliveries
12. 20 Mar 2014	Community dialogue held at Mwachema CU to discussion importance of health facility delivery and family planning. Meeting organized and facilitated by the CHEW
13. 23 Apr 2014	Supervision and mentorship by MOMI staff of a community dialogue at Vyogwani conducted by the CHEW. Topic discussed in dialogue session: decrease home deliveries by improving referrals to health facilities.
14. 25 Apr 2014	Distribute pictures for dialogue model sessions on PPC and FP to Magodzoni dispensary and Simkumbe CU, Mazumalume dispensary and Mazumalume CU and Vyogwani dispensary and the Vyokuta CU
15. 2 May 2014	MOMI staff (Eunice) attended a meeting for CHWs at Matuga dispensary. Difficulties of referral to health facility/hospital to avoid home deliveries and ensure skilled deliveries discussed.
16. 4 -11 Aug 2014	A new CU, Mkoyo CU linked to Tiwi health centre, with 50 CHWs and 15 community health committee members (these are special selected community members to be the link between community and health facility) trained as per the national guidelines for CORPs (Community Own Resource Persons) training. (Training on strengthening of immediate PPC included, training on dialogue model for uptake of PPFP not included in this training session)
17. 21 Aug 2014	Meeting (Eunice) with 15 TBAs at Magodzoni health facility (HF) to strengthen referrals by the TBAs for skilled deliveries in health facilities
18. 27 Aug 2014	Meeting (Eunice) with 13 CHWs in Mazumalume HF to increase their knowledge on early signs of labour to address issues related to deliveries occurring before arrival at the health.

19. 22 - 23 Oct 2014	Sensitization conducted by Eunice on Village Saving and loans Associations (VSLA) done at Simkumbe and Mazumalume CUs. Capacity building on VSLA to CHWs will help to keep them together and focus on MOMI interventions beyond the end of the project
20. 22 - 23 Oct 2014	Two page picture cards (to be used as support material during home visits and health education sessions) distributed in seven health facilities to be distributed among the CHWs of the CUs attached to these health facilities (± 30 cards per CU - in total 320 picture cards printed for distribution)
21. 29 - 30 Oct 2014	Sensitization conducted by Eunice on VSLA done at Vyokuta and Mtamazide CUs. Capacity building on VSLA to CHWs will help to keep them together and focus on MOMI interventions beyond the end of the project
22. 13 - 16 Nov 2014	Training on VSLA at Simkumbe CU. As part of the training, a group constitution is developed and highlights continued focus on MOMI interventions during their weekly meetings.
23. 9 - 12 Dec 2014	VSLA training of Mazumalume CU
24. 15 - 18 Dec 2014	Supportive supervision visit conducted by Eunice to Simkumbe CU and Mazumalume CU. VSLA training in Ng'ombeni, Mtamazide CU, M&E
25. 18 - 21 Feb 2015	VSLA training of Matuga CU. As part of the training, a group constitution is developed and highlights continued focus on MOMI interventions during their weekly meetings.
26. 12 Mar 2015	A mentorship visit to CHWs at Matuga CU. The proper use of the one page laminated pictures for PPC was revised. (Eunice)
27. 27 Mar and 13 Apr 2015	Distribution of A3 coloured picture booklets for uptake of PPC services to all CHEWs and health facilities by Eunice
28. 29 Apr - 2 May 2015	VSLA Training 4Ms CU, 24 CU members and 1 facility healthcare worker trained
29. 29 Apr 2015	Mentorship meeting with Mazumalume CU members. The meeting was to review the progress of the VSLA group activities and to reinforce use of picture charts for educating their households on PPC.
30. 20 - 23 May 2015	VSLA Training in Mwachema CU at Tiwi rural health centre
31. 20 May 2015	Supervision Mkongani health facility outreach activity conducted by facility nurse and CHW. The MOMI researcher attended an out-reach activity about 40km from the health facility. Dialogue session was held on postpartum care using picture frame. Importance of skilled delivery discussed with community members.
32. 21 May 2015	Mentorship and supervision for use of pictures in dialogue model sessions at 4M CU. Attended a health services out-reach where the CHEW presented postpartum fever. The session was attended by about 50-60 community members, majority women and children.
33. 22 May 2015	MOMI staff attended a regular CHWs meeting during their weekly VSLA meetings at Mazumalume. Review on progress of postpartum care in the community done, review work targets for ensuring skilled deliveries.
34. 30 May 2015	Supervision by VSLA community based trainer (Francis Munguti) of VSLA in Mwachema CU at the start of VSLA savings and table banking. Record keeping and accountability was reinforced.
35. 18 Jun 2015	Supervision by VSLA community based trainer (Francis Munguti) of VSLA in Matuga CU at the start of VSLA savings and table banking. Record keeping and accountability was reinforced.

36. 11 – 14 Aug 2015	VSLA Training at Mkoyo CU in Tiwi
37. 21 Aug 2015	Supervision by VSLA community based trainer (Mwadeje Mgala) of VSLA in Mkoyo CU. Supervision conducted during the first VSLA meeting to support the group leader with registration, documentation and record keeping.
38. 9 Sep 2015	Facilitative supervision (by Mwadeje Mgala) of VSLA in Mkoyo CU. Supervision conducted at the first time taking loans from the VSLA savings and table banking took place. The VSLA community based trainer (supervisor) ensures if the group is proficient in the transaction.
39. 9 Oct 2015	Supportive supervision of community activity (dialogue model sessions to increase uptake of PPC) at 4Ms and Mazumalume CU.
40. 10 Oct 2015	Attended a meeting with CHWs from Matuga to discuss signs of labour. This was done based on reports of late referrals to dispensary for delivery.
41. 14 - 17 Dec 2015	VSLA Training for Vyokuta CU (Vyogwani dispensary) and Chitsanze CU (Kwale sub-county hospital). A total 49 CHWs were training from both CUs
42. 15 – 16 Dec 2015	Meeting with CHWs from Mtamazide and Mazumalume CU to discuss future plans on how to continue and sustain dialogue model sessions during outreach services. Major challenges and opportunities were discussed.
43. 19, 21 and 22 Dec 2015	Facilitation for closure and share out of VSLA table banking at the end of the year in Simkumbe, Mazumalume and Mtamazide CUs. Facilitation done by a trained community based trainer (Beatrice Kauchi) from Dzumbe consultants
44. 28 – 31 Jan 2016	VSLA Training at Tseretsani, Kizibe and Mkomba CUs. The training was facilitated by trained trainers from Dzumbe consultancy. A total of 61 participants trained; Tseretsani 25, Kizibe 17 and Mkongani 19
45. 28 – 31 Jan 2016	Skills update and review of dialogue model session procedure done during the VSLA training in the three CUs (Tseretsani, Kizibe and Mkongani CUs).

Table 7: Increase knowledge on and uptake of postpartum family planning (PPFP) during the first year after delivery using the dialogue model at community and facility level

Date	Activity conducted as part of/supporting the intervention implementation
Health facility component	
1. 22 – 26 Jul 2013	18 facility health workers trained on how to perform dialogue model sessions (same health workers and part of the same training session as mentioned under the intervention above)
2. 16 -18 Oct 2013	1 st supportive supervision and mentorship visit. All 10 health facilities visited. Supervision done by Ms Esther Mwachiro (District Reproductive Health Nurse), Dr Vernon Mochache and Eunice Irungu.
3. 18 Oct 2013	Training organised at Tiwi health centre of 3 facility health workers from 3 health facilities, Magodzoni, Mazumalume and Ng'ombeni dispensary, on provision of long term family planning methods
4. 24 Oct 2013	Training organised at Tiwi health centre of 3 facility health workers from 3 health facilities, Kizibe dispensary, Mwaluphamba dispensary and Mkongani health centre, on provision of long term family planning methods
5. 1 Nov 2013	Training organised at Tiwi health centre of 2 facility health workers from 2 health facilities, Matuga and Vyogwani dispensary, on provision of long term family planning methods
6. 27 - 28 Nov 2013	2 nd supportive supervision and mentorship visit. All 10 facilities visited by Dr Vernon Mochache and Eunice Irungu. Wall charts for neonatal resuscitation distributed to the facilities.
7. Jan 2014	Structured dialogue model sessions were introduced in the health facilities after finalizing of standardized procedures. It was agreed that focus will be on 3 health facilities being; Vyongwani, Magodzoni and Mwaluphamba.
8. 11 – 13 Mar 2014	3 rd supportive supervision and mentorship visit in all 10 health facilities by Dr H. Elb-Saidy (Director of Health, Kwale County), Dr Kevin Kinyua (DMOH), Mr Galole Dima (District public health Nurse), Juma Ahmad (Community liaisons officer, Matuga sub-county), Dr Vernon Mochache and Ms Eunice Irungu.
9. 9 – 11 Apr 2014	4 th supportive supervision and mentorship visit. All 10 health facilities supervised by Mr Galole Dima (District public health Nurse), Vernon Mochache and Eunice Irungu
10. 24 – 25 Apr 2014	Distribute pictures for dialogue model sessions on PPC and FP to Magodzoni dispensary and Sumkumbe CU, Mazumalume dispensary and Mazumalume CU and Vyogwani dispensary and the Vyokuta CU
11. 10 – 13 Jun 2014	5 th mentorship, supportive supervision and M&E visit by MOMI staff (Vernon Mochache). All 10 health facilities visited.
12. 2 - 3 Sep 2014	9 newly posted facility health workers trained on how to perform dialogue model sessions (same health workers and part of the same training session as mentioned under the intervention above)
13. 10 - 12 Sep 2014	6 th supervision of intervention implementation (all health facilities visited) conducted by Eunice and Mochache.
14. 17 – 18 Sep 2014	Distribution of dialogue model presentation booklets to all health facilities (each facility received two booklets). In Simkumbe, Mzumalume and Vyokuta CU the five most active CHWs received also a booklet.
15. 15 – 18 Dec 2014	Supportive supervision and M&E visit by MOMI staff. 4 facilities visited

16. 21 – 22 Jan 2015	Field visit by Eunice to collect health facility and event diaries (only visit of those health facilities who received a diary). Attend a community activity at Matuga to supervise and support dialogue session during an out-reach activity at Nganze village.
17. 27 Mar and 17 Apr 2015	Distribution of A3 coloured picture booklets for uptake of PPC services to all CHEWs and health facilities by Eunice
18. 30 Apr 2015	Review progress of dialogue sessions on uptake of PPFP in Matuga dispensary using the A3 picture materials
19. 1 May 2015	Review progress and supportive supervision of dialogue sessions in Vyogwani dispensary and in Kwale sub-county hospital using the A3 picture materials during a medical out-reach. Discussion was on uptake of PPFP
20. 27 – 28 Jul 2015	Meeting with all health workers in-charge of MOMI health facilities. The meeting included refresher on dialogue model for uptake of PPC services and PPFP. Challenges and modifications of this intervention were discussed.
Community component²	
1. Aug – Sep 2013	547 CHWs trained/sensitized on performing dialogue model sessions on PPFP.
2. 3 Dec 2013	MOMI staff attends a community dialogue on PPFP at Mwaluphamba to support and supervise the event. The event was organized and facilitated by the CHEW of Mwaluphamba dispensary at Mtsanga Tamu primary school
3. Jan 2014	Structured dialogue model sessions were introduced in the community units after finalizing of standardized procedures. It was agreed to focus on the CUs linked with 3 health facilities, being; Vyongwani, Magodzoni and Mwaluphamba health facility
4.	Supportive supervision of CHEWs is done by MOMI staff (together with district health staff) when they supervise the health facilities (see supervision visits mentioned under 'health facility component') Supervision of CHWs is done on a continuous basis by the CHEWs (CHEWs go to CU/villages for supervision) and staff from the office of District Public Health nurse (CHWs asked to come to health facility for this supervision). MOMI team members also supervise some of the CHWs and CU activities.
5. 26 Feb 2014	Meeting organised by CHEWs Magodzoni dispensary with 17 CHWs from Simkumbe CU. Topics discussed: way forward for community dialogues and action day (including health education on long term FP) work plan.
6. 24 -25 Apr 2014	Distribute pictures for dialogue model sessions on PPC and FP to Magodzoni, Mazumalume and Vyogwani dispensary and the affiliated CUs, Simkumbe, Mazumalume and Vyokuta CU respectively.
7. 30 May 2014	MOMI staff attended a community dialogue at Magodzoni to provide mentorship during session.

² The MOMI team together with health workers decided to do dialogue model session (DMS) only during health facility outreach activities (each facility has about 1 to 2 outreach activities a week) and to extend the DMS topics to other issues regarding postpartum care (e.g. danger signs for mother and child, hygiene, nutrition). During these outreach facilities always the CHEW and/or facility nurse is around. So the DMS will be done by the CHEW or by the CHW under direct supervision of the CHEW or nurse.

8. 22 - 23 Oct 2014	Two page picture cards (to be used as support material during home visits and health education sessions) distributed in seven health facilities to be distributed among the CHWs of the CUs attached to these health facilities (± 30 cards per CU - in total 320 picture cards printed for distribution)
9. 12 Mar 2015	A mentorship visit to CHWs at Matuga CU. The proper use of the one page laminated pictures for increasing uptake of PPFP was revised (Eunice)
10. 27 Mar 2015	Distribution of A3 size picture booklets for uptake of PPC services to all CHEWs and health facilities by Eunice
11. 30 Apr 2015	Review progress of dialogue sessions in Magodzoni dispensary and supportive supervision.
12. 22 May 2015	MOMI staff attended the regular VSLA weekly meeting at Matuga to strengthen use of pictures to promote PPFP
13. 27 May 2015	Meeting with Mwachema CU. Supervise initiation of VSLA and MOMI dialogue model sessions on uptake of PPFP. The first session to be held on 3 Jun 2015
14. 3 Jun 2015	Supportive supervision and mentorship at Mwachema CU on use of pictures for uptake of PPFP during out-reach services
15. 11 Jun 2015	Supportive supervision of dialogue model session during community outreach Matuga CU. Session on uptake of PPFP. Session facilitated by a CHW
16. 16 Jun 2015	Supportive supervision of dialogue model session during community outreach Mtamazide CU. Session on uptake of PPFP
17. 7 Jul 2015	Supportive supervision of dialogue model session during community outreach Mtamazide CU. Session on uptake of PPFP
18. 11 - 14 Aug 2015	Meeting to discuss progress of dialogue model sessions and general performance and uptake of PPC and PPFP at the community level. Meeting was held during the regular VSLA meetings by the CHWs at Matuga, Simkumbe, Mtamazide and Mazumalume CUs
19. 9 Oct 2015	Supportive supervision of community activity (dialogue model sessions to increase uptake of PPC and PPFP) at 4Ms and Mazumalume CU.

3. Malawi - Ntchisi District

Interventions implemented in 12 health facilities and one community (called Traditional Authority (TA)) (table 8).

Table 8: Names MOMI intervention health facilities and communities, Malawi

Health Facilities	Communities ¹
1. Ntchisi District Hospital	
2. Malomo Health Centre	
3. Kangorwa HC	
4. Mzandu HC	
5. Chinthembwe HC	
6. Kamtsonga HC	1. Traditional Authority Malenga (Ntchisi district hospital, Kamtsonga and Chinguluwe HC) Traditional Authority
7. Chinguluwe HC	
8. Khuwi HC	
9. Mndinda HC	
10. Nkhuzi HC	
11. Malambo Dispensary	
12. Nthondo HC	

¹ In brackets is the name of the health facilities to which the TA is linked.

Three interventions are implemented in Malawi. The tables below give for each of these interventions the implementation timeline (table 9 to 11).

Table 9: Strengthen clinical management of post-partum care at the district hospital and 11 health centres (using clinical mentorship and quality care reviews)

Date	Activity conducted as part of/supporting the intervention implementation
1. 19 Aug '13	Joint review of district implementation plan to review commitments for MNCH services for Ntchisi District Health Office (DHO). This meeting was facilitated by DHO who invited all MNCH stakeholders in the district to map and mobilise resources that complements PPC and MOMI objectives
2. 2 Sep 2013	Start MOMI clinical PPC intervention implementation in health facilities
3. 5 - 16 Sep 2013	PACHI MOMI and DHO staff visited all the 11 health centres to brief health workers on the MOMI project, share findings from situation analysis and stakeholder causal analysis and share the draft interventions as well as introduce the mentorship program for MOMI intervention implementation.
4. 25 Nov - 5 Dec 2013	1 st round of mentorship visits by DHO MOMI core team members ³ to all the 12 MOMI facilities including the district hospital. The DHO MOMI core team comprises 10 district health office staff members. For each MOMI pillar/intervention (Clinical PPC, PPFP and Community PPC) one of these 10 staff members is the focal person. Supervision is conducted by these three pillar teams together (usually without PACHI MOMI staff). Standard operating procedures (wall charts) and PPC guidelines were distributed during these visits to some of the health facilities ⁴ .

³ The MOMI core team has 10 staff members who are all MoH staff based at the district hospital. Each MOMI pillar (= MOMI intervention - Clinical PPC, PPFP and Community PPC) has one focal person (this person is one of the 10 MOMI core team staff members) and some MOMI core team members. The MOMI core teams coordinate the implementation of the MOMI interventions in the field.

5. 23 Apr 2014	Mentorship visit by the MOMI core team members at Kangolwa HC. Objective of this visit: target and discuss the many gaps and weakness regarding PPC service delivery identified in this HC.
6. 24 Apr – 9 May 2014	1 st supervision visit: the three DHO MOMI responsible MOMI core teams (core team members - Clinical PPC, PPFP and Community PPC) conducted supervision together of all MOMI health facilities in Ntchisi. The objective was to identify gaps and strengths as a basis for mentorship.
7. 29 May 2014	Training on the use of data to help develop responsive PPC interventions based on evidence. The training was organised by PACHI and attended by 26 health workers selected from all the MOMI health facilities.
8. 17 Jun 2014	Meeting to support clinical PPC by reducing maternal and infant deaths due to obstetric haemorrhage and anaemia. The meeting was organised and facilitated by PACHI for health workers from all facilities.
9. 10 Sep 2014	Community based group meeting at senior group Karonga in TA Malenga which is catchment area for Kamsonga health centre. The objective was to mobilise community members on adoption of positive health seeking behaviour for PPC services.
10. 25 Sep 2014	Distribution of PPC guidelines for clinical care to three additional health facilities (Khuwi, Kamsonga and Malomo health centres) by Victoria Minofu, Maimwana and Ntchisi MOMI team. These facilities did not receive guidelines during the first mentorship visit. (still not all facilities received guidelines)
11. 13 Mar 2015	MOMI project orientation to the restructured Ntchisi district health management team (DHMT) following posting of new key personnel (district health officer, district medical officer, district nursing officer and district environmental health officer). The meeting was facilitated by PACHI and Ntchisi DHO MOMI team. Through this meeting the DHMT provided policy and technical guidance on the implementation of MOMI for the remaining study period.
12. 7 - 8 May 2015	Training of 35 health workers from all the 11 MOMI implementing health facilities on MOMI PPC guidelines for clinical care and data management. The training was facilitated by Zione Dembo, the MoH district coordinator and one members of the district health office MOMI core team.
13. 2 Sep 2015	Meeting of the PACHI MOMI project team (Charles Makwenda and Zione Dembo) at the district health office. The aim was to discuss with DHMT the replacement of the DHO MOMI project activities coordinator and to ensure continuity of activities. This followed the resignation of the former coordinator which led to slow down of implementation. A new coordinator was appointed and oriented on the roles and responsibilities regarding the MOMI project.
14. 3 - 4 Sep 2015	Joint supportive supervision of PACHI and DHMT of all 12 facilities. The supervision was done to provide technical support for health service provision including provision of PPC. The team was using a checklist which was focusing on the following areas: availability of human resource, equipment, drugs and supplies and quality of care.

⁴ The wall charts and guidelines were distributed in only some of the MOMI health facilities. Training or instructions for health facility workers on how to use wall charts and/or guidelines were not provided. It is planned to organise this kind of training for the health workers in April 2015.

Table 10: Increase utilization of postpartum family planning

Date	Activity conducted as part of/supporting the intervention implementation
1. Sep 2013	Start MOMI PPFP intervention implementation at health facilities
2. 5 -16 Sep 2013	PACHI MOMI and DHO staff visited all the 11 health centres to brief health workers on the MOMI project, share findings from situation analysis and stakeholder causal analysis and share the draft interventions as well as introduce the mentorship program for MOMI intervention implementation.
3. period 12 Jan – Feb 2014	1 st round of mentorship visits by the core MOMI team on PPFP to all the 12 MOMI facilities including the district hospital
4. 21 Feb 2014	Conduct sensitization meetings and dialogue sessions on PPFP at TA Malenga. Conducted by the MOMI core team on community PPC.
5. period 1 - 30 Apr 2014	1 st supervision visit conducted by the PPFP MOMI core team of all MOMI health facilities in Ntchisi. The objective was to identify gaps and strengths as a basis for mentorship.
6. 10 - 18 Nov 2014	Recruitment of 23 community based drug administrators (CBDAs) for door-door distribution of FP commodities in partnership with Clinton Health Access Initiative (CHAI). TA-Malenga, Kasakula. Recruitment is based on set criteria and was facilitated by community leaders and the MOMI DHO coordinator.
7. 11 - 12 Dec 2014	CBDAs training of 23 CBDAs & training of 11 HSAs and 11 nurses as supervisors for the CBDAs (CBDAs are supervised by the HSAs and HSAs are supervised by nurses). Training was supported financially by CHAI and coordinated in partnership with DHO MOMI core team members
8. 27 - 28 Dec 2014	Long acting reversible contraceptive awareness conducted in sub-traditional authority (STA) Kasakula. The district family planning coordinator who is also MOMI district coordinator facilitated this event which was attended by community members from STA Kasakula
9. 4 - 30 May 2015	Training of health care workers (clinical officers, medical assistants and nurses) on long acting contraceptive methods by the reproductive health directorate of ministry health. 14 health care workers from the 11 MOMI facilities were trained which included the MOMI district coordinator, the community and clinical leader pillars were trained as master trainers. (MOMI played a role by lobbying and liaising with the reproductive health directorate to include the participants from Ntchisi district health office who initially were not part of the targeted districts. The lobbying process was facilitated by Zione and Bwazi through the director of reproductive health at MoH who is a MOMI PAB member.)
10. 22 – 24 Jun 2015	Supervision of family planning intervention at MOMI health facilities. Supervision conducted by officials from the reproductive health directorate together with Bwazi and Eliza Chikoja (the district family planning coordinator).

Table 11: Strengthen community postpartum care management

Date	Activity conducted as part of/supporting the intervention implementation
1. 12 – 15 Nov 2013	Identification of volunteers to become community group facilitators (women, men and youth groups) – Identification of trainers to conduct training of male PPFP motivators (men as male motivators), of women (for home to home visits) and of facilitators for Women, Men and Youth Groups
2. 14 – 18 Feb 2014	MOMI community mobilization meeting involving local leaders (Area Development Committees) and sensitizing community leaders to promote PPC in the MOMI project focus area in three TAs of Chikho, Kasalula and Malenga
3. May 2014	Start MOMI community intervention
4. 10 - 13 Jun 2014	Review of training manuals for community group training (men, women & youth) at Mponela. Facilitated by Maimwana (is previous PACHI MCH project) staff. These training manuals were the tools used for the training of community volunteers that provide community PPC and facilitate community groups. ⁵
5. 4 – 8 Aug 2014	Training of 24 MOMI women and men group facilitators (are members of the community) and 3 HSAs at Mponela on how to facilitate group meetings (done by Victoria, Maimwana and Ntchisi DHO MOMI core team) – <i>first part of the training</i>
6. 19 – 21 Aug 2014	District area development committee (ADC) meeting on MNCH specifically FP, PPC, antenatal care, labour and delivery in TAs Chilooko, Malenga, Nthondo, Kalumo, Chikho and Vuso Jere in Ntchisi district. ADC is community structures which act as bridge between health workers and community members and they are key in community mobilisation for health issues. The mentioned TAs belong to the catchment area of the MOMI health facilities. The meeting with the ADCs was organised to sensitize communities on the importance of clinical PPC and to mobilise people in the community to go for PPC to the health facilities.
7. 25 - 29 Aug 2014	Training of community group facilitators at Mponela. A total of 24 volunteers were trained. The training was facilitated by Maimwana staff who have experience in working with community health volunteers. The subjects discussed were: briefing of MOMI project, basic information on MNCH, participatory approaches and group facilitation principles and skills, male involvement in PPC issues and infant feeding practices – <i>second part of the training</i> (first part see row 5)
8. 8 Sep 2014	Community group meeting for senior group village-head Malenga, TA Malenga. This meeting was to introduce the trained community facilitators to the community leaders and entire community and to enhance understanding of the roles of the trained volunteers/facilitators and gain support.
9. 15 - 19 Sep 2014	Supervision visit by MOMI community pillar focal person to assess performance of community group facilitators. Men and women groups were visited. 3 facilitators were supervised.

⁵ The in MOMI followed community group approach involves women, men and youth groups in a four-phase participatory learning and action cycle. These four phases are: Phase 1, identify and prioritise problems during pregnancy, delivery, and postpartum; phase 2 plan and phase 3 implement locally feasible strategies to address the priority problems; phase 4, assess their activities.

10. 1 Oct 2014	Meeting with senior group village-heads and families over malpractices in MNCH (postpartum care) TA Malenga. The meeting was facilitated by Ntchisi district safe motherhood coordinator.
11. 21 Oct 2014	Sensitization/awareness meeting with community members at senior group village-head Mtegha on community group activities at TA Malenga This was a community sensitization meeting on PPC to mobilise people to access PPC services in health facilities and communities
12. 21 - 24 Oct 2014	Supervision visit of community based PPC at TA Malenga. HSAs supervised the trained volunteers/facilitators three in village heads - Matenge, Kalonga and Mtema. Supervision was facilitated by the MOMI focal person for Community PPC
13. 22 Oct 2014	Sensitization/awareness meeting with community members at senior group village-head Kalonga on community group activities
14. 29 Oct 2014	Follow up of all TBAs in the TA & reinforcement of the new roles of the TBA at TA Malenga. Objective meeting; to support health facility service delivery for antenatal care, labour and deliver and PPC through education and counselling and referral of patients to health facilities. The meeting was facilitated by Ntchisi DHO MNCH staff. Mrs Bwazi (focal MOMI core team member) took the opportunity to join this meeting to promote PPC.
15. 29 May 2015	Supervision of community interventions by Zione Dembo, Eliza Chokoja (community interventions leader at the district health office) and Allan Mchenga (MOMI research assistant). 25 MOMI community facilitators for the men, women and youth groups were supervised.
16. 29 Jun - 3 Jul 2015	Completing (phase 2 – first part of this phase 2 training see row 7) the training of community facilitators (volunteers) on the community action cycle. 24 community facilitators from the women and male motivator groups and 3 health surveillance assistants were trained. The health surveillance assistants were trained as the supervisor of the volunteers. The training was facilitated by Zione, Esther Kainja, Gladwell Potifala from PACHI and Elizabeth Chikoja (MoH team leader for MOMI community interventions).
17. 1 - 3 Jul 2015	Development and distribution of MOMI community interventions education and counselling materials. Family planning male motivator flyers and PPC picture book were developed and distributed to the 24 community facilitators at the completion of their phase two training.
18. 9 Jul 2015	Supervision of two community facilitators (volunteers) community action cycle meeting at snr group Karonga within traditional authority Malenga. The supervision was done by Allan from PACHI.
19. 12 - 14 Oct 2015	Supervision of community interventions by Zione Dembo, Allan (PACHI) Eliza Chikoja (MoH). Six community facilitator volunteers were visited and supervised on community action cycle meetings. Two volunteers were supervised on home visits for mother and child in the first week postpartum period

4. Mozambique - Chiúta District

Interventions implemented in 4 health facilities and 25 communities (table 12).

Table 12: Names MOMI intervention health facilities and communities, Mozambique

Health Facilities	Communities
1. Manje HC (Type I)	1. Daka 2. Chiritse 3. Malolo 4. Nfigo 5. Chicoco 6. Cachere 7. Lumadzi 8. Mphonde
2. Kaunda HC (Type II)	9. Mpondo 10. Zuze-Lipákwes 11. Mayombe 12. Muana'gombe 13. Chiuta-Serra 14. Kapalautsi
3. Mavudzi Ponte HC (Type II)	15. Nhantsato 16. Chimpunga
4. Kazula HC (Type II)	17. Mantsamba 18. Chipiri 19. Samica 20. Kató 21. Chithe 22. Muchena 23. Matacale 24. Chitutu 25. Ntindiza

Note: The communities mentioned on the same row as the health centres in the first column are those linked with the health centre mentioned in this first column

Three interventions are implemented in Mozambique. The tables below give for each of these interventions the implementation timeline (table 13 to 15).

Table 13: Mother and newborn postpartum risk assessment and management at community and facility level upgraded - Early detection, treatment and referral of PP complication cases in health facilities and communities

Date	Activity conducted as part of/supporting the intervention implementation
Health facility component	
1. 9 - 20 Sep 2013	Training of 10 facility health workers (MCH nurses and health officers) on PPC, PP risk assessment and the use of the checklist
2. 23 -24 Sep 2013	Pre-intervention visit of all health facilities by MOMI supervisor. Checklist were distributed to all facilities and the used of this list was again explained (1 st time explained during training above)
3. Oct 2013	Start implementation PPC MOMI intervention at health facility level in Manje HC, Kaunda HC and Mavudzi Ponte HC
4. 4 – 6 Feb 2014	1 st field visit/supervision of all MOMI project health facilities. Field visit/supervision conducted in cooperation with MOMI FMUP team.
5. Mar 2014	Start implementation PPC MOMI intervention at health facility level in Kazula HC
6. 4 – 6 Apr 2014	2 nd supportive supervision of all MOMI project health facilities. All HFs were visited. Supervision was conducted by Dr Foia (district health officer and MOMI responsible of MOMI implementation at district level) and nurse Berta together with the MOMI coordinator based in Maputo
7. 9 - 13 Jun 2014	3 rd supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed. Conducted by Dr Foia and nurse Berta.
8. Jul 2014	Establishment of communication system for referral between type I and type II Health Centres in Manje (use of toll free number)
9. 17 - 27 Nov 2014	4 th supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed and to access to the work flow between the HW and the CW on the check list 1 and on complications referrals. Conducted by Dr Foia and nurse Berta.
10. 26 – 27 Jan 2015	Training of 14 facility health worker (MCH nurses and health officers) on the use of the check list 2, and also refresher training on use of the check list 1 and its challenges. (pictures of the flipchart used during the training are in the folder in the Mozambique dropbox WP6-Training-training January 2015-check list2)
11. 2 – 6 Mar 2015	5 th field visit/supervision of all MOMI project health facilities. Field visit/ supervision conducted in cooperation with MOMI FMUP team. We visited the health centres of Manje, Kaunda and Mavudzi ponte.
12. 22 – 23 Apr 2015	Refresher training and training of 18 facility health worker (MCH nurses, technical medicine officers and technical preventive officers). Refresher training on PP risk assessment through the use of checklist 1 and 2 and on integration of PP consultations at MCH, vaccination and outpatient care consultation. Flow charts for the use of checklists were developed.
13. 27 – 28 Apr 2015	Training follow-up visits at health facilities of Kazula, Kaunda and Mavudzi ponte and distribution of the checklists.
14. 25 - 28 Aug 2015	6 th field visit/supervision of MOMI project health facilities conducted in cooperation with, ICRHM (Maputo and Tete), MOMI FMUP team and Medicine Faculty of UEM. The team visited the health centres of Manje, Kaunda and Mavudzi ponte.

15. 6 Oct 2015	On the Job training at Manje HF following the recommendations of the supervisions of MOMI team (ICRHM Maputo, UEM, FMUP). Training on integration of maternal and child health services, reinforcing the use of the checklist (in order to improve quality of care), and upgrading the referral system. Participants: 1 MCH district officer, 2 MCH nurses, 1 nutrition officer (all based at Manje health facility).
Community component	
1. 21 - 30 Apr 2014	Training of 47 CHWs (APEs and TBAs) on detection and management of PP risk and PP danger signs among mother and newborn using a checklist and distribution of checklists immediately after training.
2. Apr 2014	Establishment of communication system for referral between Community (CHWs and TBAs) and health centres. CHWs and TBAs can use toll free line to call the health centre to refer a patient, seek transport (ambulance) and ask oral assistance/information at facility health workers regarding a client.
3. May 2014	Start implementation PPC MOMI intervention at community level
4. 9 - 23 Jun 2014	Supportive supervision conducted by Dr Foia (district health officer and MOMI responsible of MOMI implementation at district level) and nurse Berta. All CHWs were visited. The objective was to see how checklists are completed.
5. 17 - 27 Nov 2014	Supportive supervision conducted by Dr Foia (district health officer and MOMI responsible of MOMI implementation at district level) and nurse Berta. All CHWs were visited. The objective was to see how checklists are completed and how the CHWs coordinate these activities with the nurses of the peripheral health facilities (referral, delivery of the completed check list).
6. 28 - 31 Jan 2015	Training of 49 CHW (APEs and TBAs) on the use of the check list 2, as well as refresher training on the use of check list 1 and its challenges.
7. 2 - 6 Mar 2015	Field visit/supervision conducted in cooperation with MOMI FMUP team. The team visited the communities and its community health workers of Chiritse, Malolo, Nhansato and Chimpunga.
8. 24 Apr 2015	Refresher training of community health workers (APEs) on PP risk assessment and management of the women, newborn and infants at community level using the risk assessment checklist 1 and 2.
9. 25 Apr 2015	Refresher training of community health workers (TBAs) on PP risk assessment and management of the women, newborn and infants at community level using the risk assessment checklist 1 and 2. And distribution of non-financial incentives for the MOMI TBAs (T-shirts, African cloth/wrapper and scarves)
10. 22 Sep 2015	Meeting with 8 community health workers (APEs), the head of MCH at Manje health facility, the provincial MCH nurse and MOMI Tete province team. The objective of the meeting was to inform the provincial MCH nurse on the MOMI project and also to monitor the performance of the APEs on the filling of the checklists and management of referrals.

Table 14: Scale up Access to Family Planning methods during PP period

Date	Activity conducted as part of/supporting the intervention implementation
1. 9 - 13 Sep 2013	Training of MCH nurses and health officers (Agentes de Medicina) on PPFP (including PP IUD) – 10 in total (training is part of the training mentioned in table 13 that had place between 9 and 20 Sep 2013)
2. Oct 2013	Start MOMI PPFP intervention implementation at health facilities
3. 4 – 6 Feb 2014	1 st field visit/supervision of all MOMI project health facilities. Field visit/supervision conducted in cooperation with MOMI FMUP team.
4. 4 – 6 Apr 2014	2 nd supportive supervision of all MOMI project health facilities. All HFs were visited. Supervision was conducted by Dr Foia (district health officer and MOMI responsible of MOMI implementation at district level) and nurse Berta together with the MOMI coordinator based in Maputo
5. Mar, Apr and May 2014	The health sector of the Chiuta District realized mobile health team visits to the communities of Daka, Chiritse, Malolo, Iumadzi, Zeze-lipakwe, Zuze Camama, Goloi, Camulambe 2, Nhantsato, Cachere, Mpondo, Tsemene, Chicote, Chimpunga, Chithapsu, Capalautsi, Muchena e Mantsamba. The activities integrate vaccination, Vitamin A supplementation, deworming, antenatal care, FP and PPC. Concerning FP and PPC, to 948 women made a consultation on family planning and to 201 was conduct a post-partum consultation
6. 9 - 13 Jun 2014	3 rd supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed. Conducted by Dr Foia and nurse Berta.
7. 16 and 30 Jun; 18, 21, 23, 28 and 30 Jul; 18, 20 and 22 Aug 2014	The health sector of the Chiuta District realized mobile health team visits to the communities of Daka, Chiritse, Malolo, Zuze-Lipakwe, Zuze-Canhama, Goloi, Mpondo, Capalautsi, Nfigo, Samica, Chicoco, Muchena, Mantsamba, Sapemba. The activities integrate vaccination, Vitamin A supplementation, deworming, antenatal care, FP and PPC. Concerning FP and PPC, to 316 women made I consultation on family planning.
8. 17 – 27 Nov 2014	4 th supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed and to assess the work flow between the HW and the CHW on the check list 1 and on complications referrals and to assess the acceptability of the IUD. Conducted by Dr Foia and nurse Berta.
9. 26 Jan 2015	Distribution of FP materials (booklets) at health facilities
16. 2 – 6 Mar 2015	5 th field visit/supervision of all MOMI project health facilities. Field visit/supervision conducted in cooperation with MOMI FMUP team. We visited the health centres of Manje, Kaunda and Mavudzi ponte.
17. 21 Apr 2015	Refresher training of 8 facility health worker (MCH nurses) on FP use and FP counselling with focus on long acting reversible contraceptives.
18. 27 – 29 Apr 2015	Training follow-up visits at health facilities of Kazula, Kaunda and Mavudzi ponte. Family planning issues were particularly focused on. Referral from MCH, vaccination, and outpatient department clinics to FP clinics/services was supervised and its importance stressed.

Table 15: Improve access to and use of maternal PPC and services by integrating PPC for mothers and infants at health centres (one-stop service)

Date	Activity conducted as part of/supporting the intervention implementation
1. 9 - 20 Sep 2013	Training of MCH nurses and health officers (Agentes de Medicina) on integration of maternal and infant services (is same training session as mentioned in table 13 and 14 – same 10 health workers)
2. Oct 2013	Reorganization and integration of maternal and infant services
3. Nov 2013	Start providing integrated services for mother and infants by the same nurse, during the same visit. Integrated care offered during the 42 days after childbirth and in long-term care (vaccination calendar) in all HFs covered by the project
4. 4 – 6 Feb 2014	1 st field visit/supervision of all MOMI project health facilities. Field visit/supervision conducted in cooperation with MOMI FMUP team.
5. 4 – 6 Apr 2014	2 nd supportive supervision of all MOMI project health facilities. All HFs were visited. Supervision was conducted by Dr Foia (district health officer and MOMI responsible of MOMI implementation at district level) and nurse Berta together with the MOMI coordinator based in Maputo
6. 9 - 13 Jun 2014	3 rd supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed. Conducted by Dr Foia and nurse Berta.
7. 17 – 27 Nov 2014	4 th supportive supervision of all MOMI project health facilities. All HFs were visited. The objective was to see how checklists are completed and to assess the work flow between the HW and the CHW on the check list 1 and on complications referrals and to access the acceptability of the DIU. Conducted by Dr Foia and nurse Berta.
8. 2 – 6 Mar 2015	5 th field visit/supervision of all MOMI project health facilities. Field visit/supervision conducted in cooperation with MOMI FMUP team. We visited the health centres of Manje, Kaunda and Mavudzi ponte.
9. 22 – 23 Apr 2015	Refresher training and training of 18 facility health worker (MCH nurses, technical medicine officers and technical preventive officers). Refresher training on integration of PP consultations at MCH, vaccination and outpatient care consultation.
10. 27 – 29 Apr 2015	Training follow-up visits at health facilities of Kazula, Kaunda and Mavudzi ponte and distribution of the checklists.
11. 25 - 28 Aug 2015	6 th field visit/supervision of MOMI project health facilities conducted in cooperation with ICRHM (Maputo and Tete), MOMI FMUP team and Medicine Faculty of UEM. The team visited the health centres of Manje, Kaunda and Mavudzi ponte.
12. 22 - 23 Sept 2015	Inform the provincial MCH nurse on the activities of MOMI project and supervision of the health facilities of Manje and on the job training on integration of maternal and child health services on Kaunda and Mavudzi-ponte health facilities attended by 2 health care workers in Kaunda and 3 health care workers at Mavuzi ponte.
13. 6 Oct 2015	On the Job training at Manje HF following the recommendations of the supervisions of MOMI team (ICRHM Maputo, UEM, FMUP). Training on integration of maternal and child health services, reinforcing the use of the checklist (in order to improve quality of care), and upgrading the referral system. Participants: 1 MCH district officer, 2 MCH nurses, 1 nutrition officer (all based at Manje health facility).

Appendix 3 – Directed Acyclical Graph

MOMI interventions and maternal, neonatal and infant mortality: Directed Acyclical Graph (DAG) for estimation of unbiased causal effects of the MOMI interventions on post-partum care and birth spacing (as a result of family planning); and linking to effects on mortality via Monte Carlo simulation of effects of outcomes on mortality

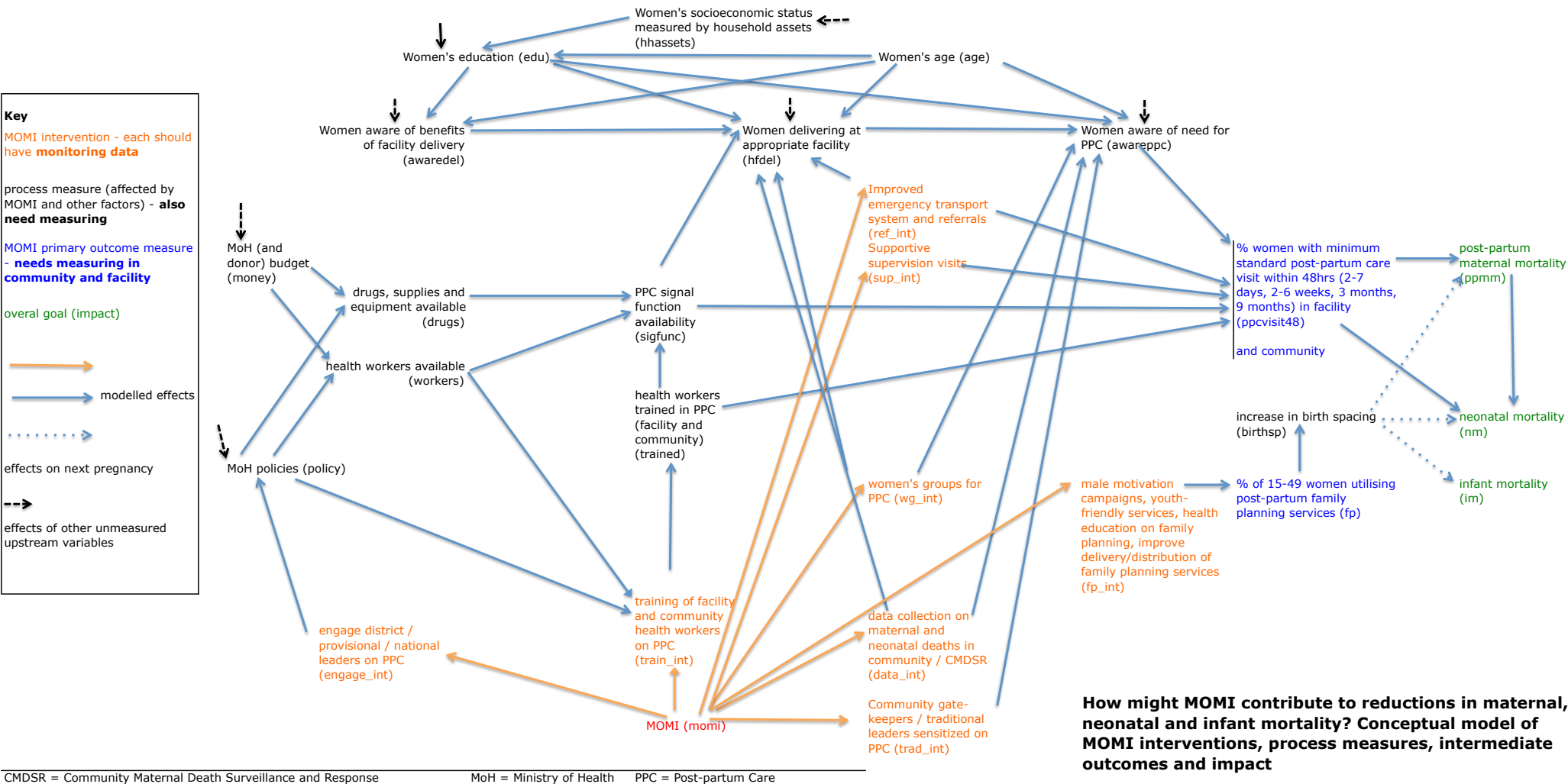
Tim Colbourn 10th March 2013

The conceptual model

Figure 1 on the following page is a conceptual model of how the MOMI interventions might contribute to reductions in maternal, neonatal and infant mortality via outcomes (in blue) we aim to measure such as quality (minimum standard) post-partum care visits at certain time periods (e.g. 48hrs, variable named `ppcvisit48`, all variable names in brackets at the end of the text for each variable in Figure 1) and utilisation of post-partum family planning services (`fp`). We should work this model out together as a team because it will enable us, via then running through the steps of building a DAG (see rest of this document) it will tell us what data we need to collect to estimate unbiased effects of the MOMI interventions (in orange in the figure) on the measured outcomes.

In order to extrapolate these effects to impact on maternal, neonatal and infant mortality, we will need to make assumptions as to how our measured outcomes (blue variables) effect these end points. We can do a meta-analysis of available literature for this, or if there is inadequate literature, model this via estimating lower and upper bounds of the effect of each outcome on each of the mortality variables (actually better to characterise the distributions of each of the effects with a mean and standard error) and then running monte carlo simulations taking say 10,000 random draws from these distributions (this can be done in Excel). To integrate with the original model of the MOMI interventions on the observed outcomes (`ppcvisit` and `fp`) we would need to simulate a dataset based on the results of both the monte carlo simulation and the original model (this should be possible in Stata).

Figure 1: conceptual model



The DAG

DAGitty is a software package for producing causal diagrams or Directed Acyclical Graphs (see Textor (2011) paper and the DAGitty software manual: 'manual-2.x.pdf' also attached to this email). DAGs are a relatively new method in epidemiology that is generally agreed as a better method for producing unbiased models of the effect of your intervention (exposure) on your outcome, than traditional approaches to eliminating confounding such as stepwise regression. DAGitty is free to download and use, or easier still directly usable in your web browser at www.dagitty.net

As detailed in the DAGitty manual (manual-2.x.pdf) it's best to write out the variable names and types and then the causal pathways between them in Word and then copy and paste this into the DAGitty 'Model text data' window: first list variables with a space afterwards indicating whether they are: Exposure (E); Outcome (O); Unobserved (U); Adjusted (A), i.e. included in the model as covariates in order to estimate the unbiased effect of the exposure on the outcome; other variables (1), these are common ancestors etc. that are needed in the DAG.

Second, after a one line gap, list the connections from each variable on a new line starting with the variable of interest and then listing all variables that variable is connected to with spaces inbetween (e.g. $A \rightarrow B$ and $A \rightarrow C$ is written A B C). See ***** for start and end of text to copy into the DAGitty 'model text data' window.

Follow six-step procedure for creating unbiased models of effect of E on O detailed in: Shrier I, Platt R. Reducing bias through directed acyclic graphs. *BMC Medical research methodology* 2008, 8:70

Step 1. The covariates chosen to reduce bias should not be descendants of E:

means the following variable can't be chosen as covariates in the model: **ppcvisit48** (but this is included as an O) **ppmm nm im** (all of these mortality variables have to be excluded –from the model but not the DAG - unless we are able to include them as outcomes – currently we are not because we'll have no accurate data on them, therefore they remain in the DAG as U but not in the regression model), same also for birthsp due to too long time period; **fp** (but this is included as an O) **awareppc trained sigfunc hfdel policy workers drugs**. This leaves **money awaredel edu hhassets** and **age** as the potential A variables (other unmeasured ancestors indicated by black dashed arrows can only be U and not A as we can have no data on them). Let's set all 5 of them as A (see first part of code below) and then add the arrows (causal pathways) as hypothesized and detailed in the Excel spreadsheet 'MOMI evaluation quantitative modeling estimates' sheet: 'DAG (Step 0)' going from left to right:

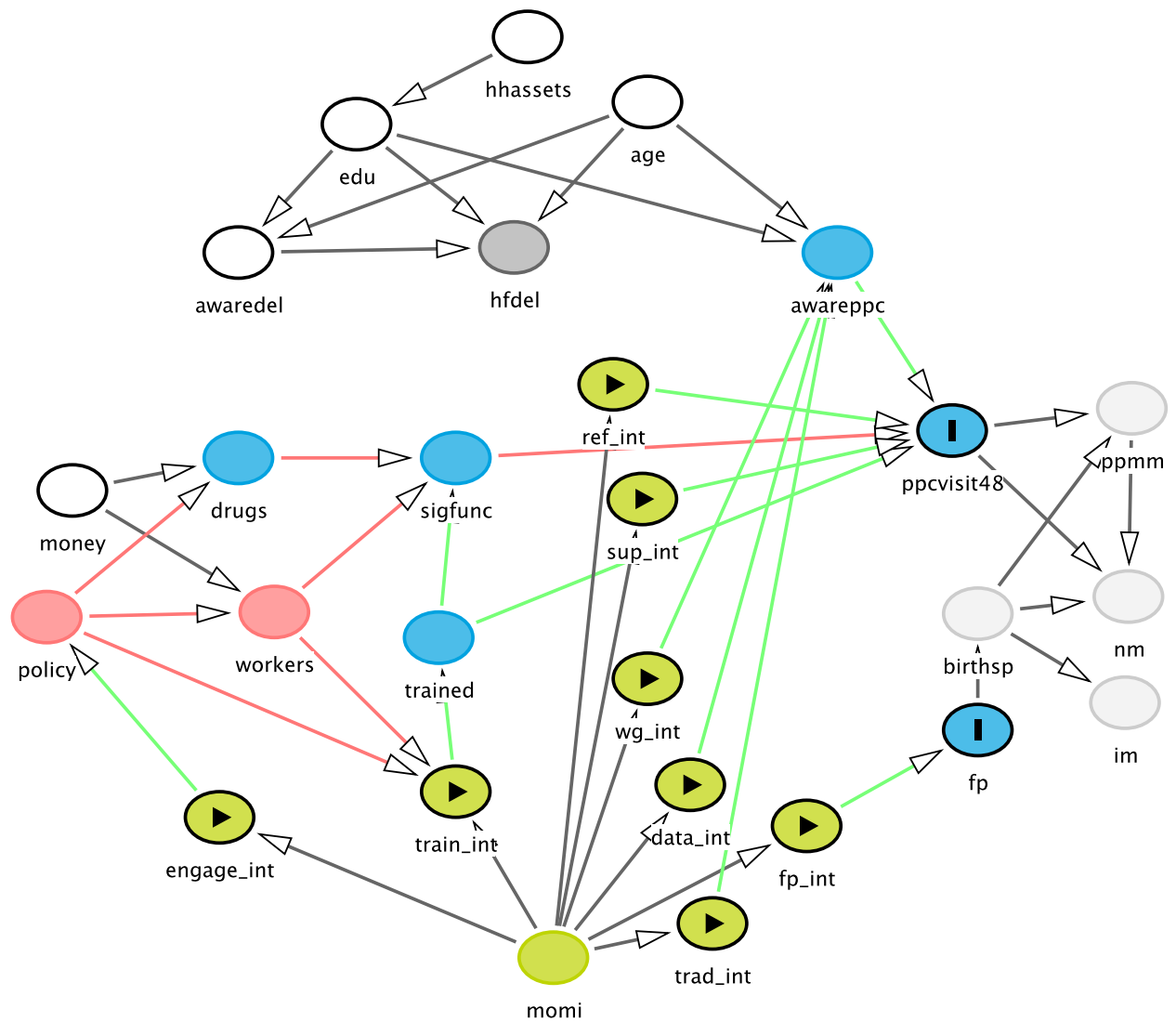
*****start DAGitty code here*****

ppmm U
nm U
im U
ppcvisit48 O
awareppc 1
birthsp U
fp O
fp_int E
ref_int E
sup_int E
wg_int E
data_int E
trad_int E
hfdel 1
sigfunc 1
trained 1
train_int E
awaredel A
drugs 1
workers 1
money A
policy 1
engage_int E
momi 1
edu A
hhassets A
age A

money drugs workers
policy drugs workers train_int
engage_int policy
awaredel hfdel
drugs sigfunc
workers sigfunc train_int
edu awaredel hfdel awareppc
hhassets edu
sigfunc ppcvisit48
trained sigfunc ppcvisit48
train_int trained
momi engage_int train_int ref_int sup_int wg_int data_int trad_int fp_int
hf_del awareppc
age awaredel hfdel awareppc
ref_int ppcvisit48
sup_int ppcvisit48
wg_int awareppc
data_int awareppc
trad_int awareppc
awareppc ppcvisit48

```
fp_int fp
ppcvisit48 ppm nm
birthsp ppm nm im
fp birthsp
ppm nm
*****end DAGitty code here*****
```

Step 1 DAG:



In order to reproduce this diagram exactly the first paragraph of DAGitty code should be replaced with this, which also contains the location (of the nodes on the diagram) information:

age A @2.578,-8.485
 awaredel A @-3.098,-5.729
 awareppc 1 @5.214,-5.729
 birthsp U @7.162,0.880
 data_int E @3.172,4.011
 drugs 1 @-3.098,-1.970
 edu A @-1.459,-8.078
 engage_int E @-3.360,4.607
 fp O @7.162,3.009
 fp_int E @4.787,4.763
 hfdel 1 @0.726,-5.823
 hhassets A @0.916,-9.675

im U @9.205,2.508
momi 1 @1.272,7.175
money A @-5.402,-1.375
nm U @9.252,0.566
policy 1 @-5.758,0.942
ppcvisit48 O @6.806,-2.472
ppmm U @9.300,-2.879
ref_int E @2.103,-3.317
sigfunc 1 @-0.082,-1.970
sup_int E @2.507,-1.219
trad_int E @3.481,6.548
train_int E @-0.082,4.137
trained 1 @-0.319,1.318
wg_int E @2.578,2.070
workers 1 @-2.599,0.848

Step 2. Delete all variables that satisfy all the following criteria: 1) non-ancestors of E, 2) non-ancestors of the outcome and 3) non-ancestors of the covariates that one is including in the model to reduce bias:

Deleted: hfdel ppmm nm im birthsp

(this step done automatically when you press 'm' in DAGitty, along with steps 2-5)

Step 3. Delete all lines emanating from E:

Delete:

engage_int → policy

train_int → trained

ref_int → ppcvisit48

sup_int → ppcvisit48

wg_int → awareppc

data_int → awareppc

trad_int → awareppc

fp_int → fp

(this step done automatically when you press 'm' in DAGitty, along with steps 2-5)

Step 4. Connect any two parents sharing a common child:

Need the following new connections:

money policy

policy workers

workers momi

workers drugs

drugs trained

edu age

sigfunc awareppc

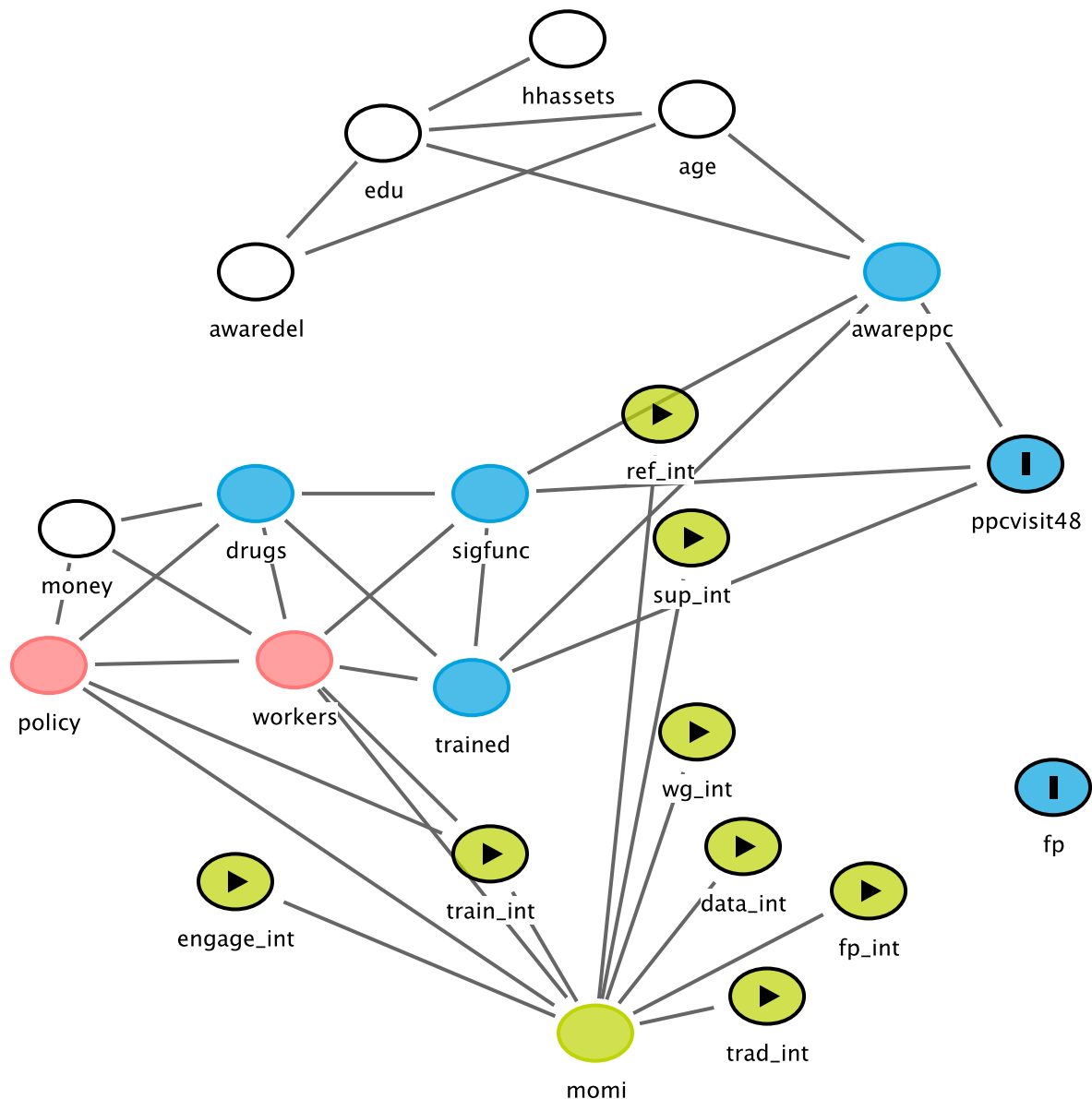
trained awareppc

(this step done automatically when you press 'm' in DAGitty, along with steps 2-5)

Step 5. Strip all arrowheads from lines:

(this step done automatically when you press 'm' in DAGitty, along with steps 2-5)

Step 5 DAG:

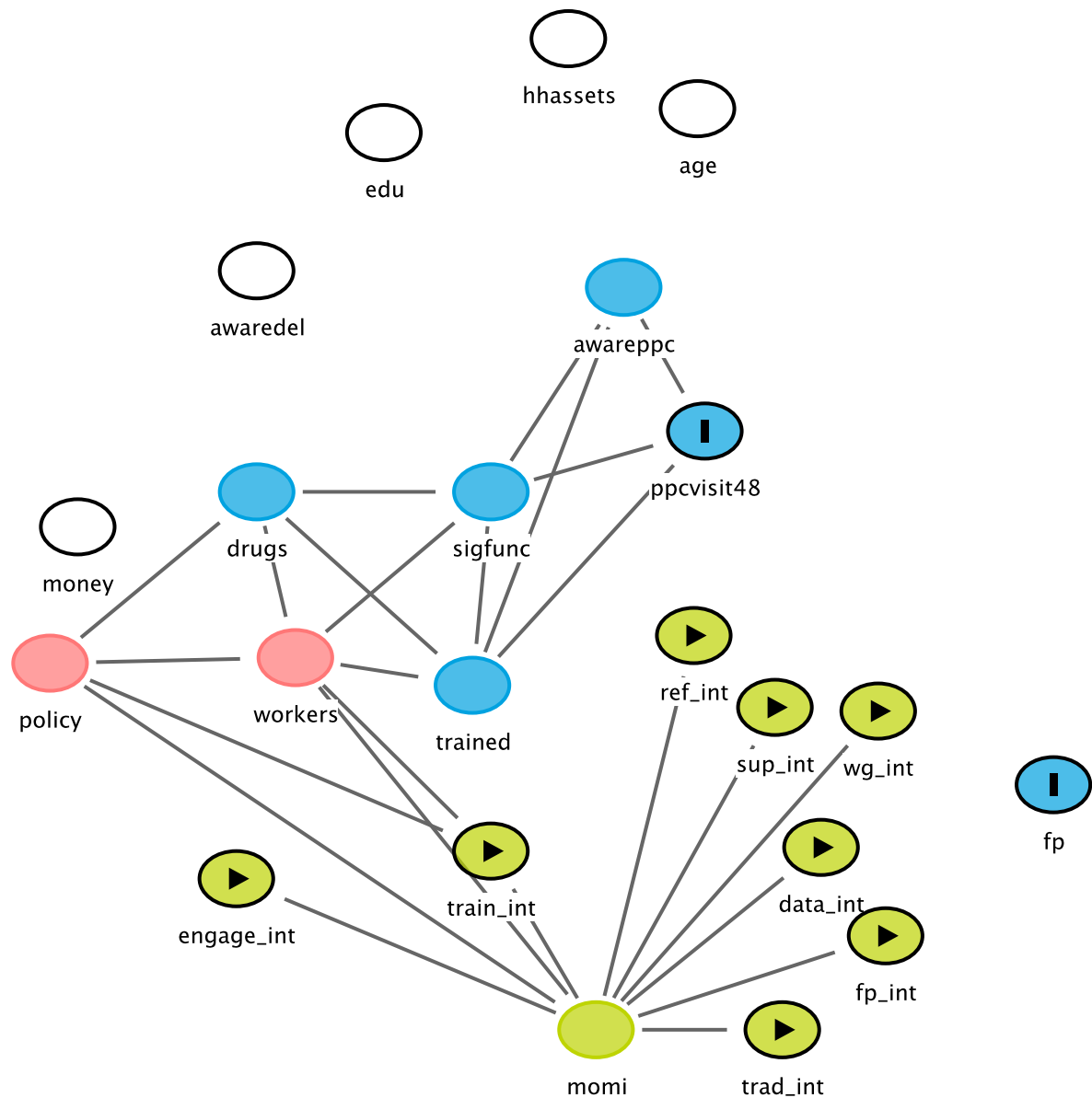


Step 6. Delete all lines between the covariates in the model and any other covariates

This is not done as part of the ‘moral graph’ (pressing ‘m’) in DAGitty!

Given all of our 5 current A variables are on the periphery removing the links from them doesn’t remove all pathways from the E to the O. However it does for the **fp** outcome (even when **age** and **edu** are parents of **fp**, which they were not in the original DAG, but should’ve been).

Step 6 DAG v1 (nodes slightly moved to see clearly the separation between O (blue) and E (yellow))



The code for this DAG is:

*****start DAGitty code here*****

```
age A @2.578,-8.485
awaredel A @-3.098,-5.729
awareppc 1 @1.628,-5.447
birthsp U @7.162,0.880
data_int E @4.169,4.074
drugs 1 @-3.098,-1.970
edu A @-1.459,-8.078
engage_int E @-3.360,4.607
fp O @7.162,3.009
fp_int E @5.001,5.577
hfdel 1 @0.726,-5.823
```

```

hhassets A @0.916,-9.675
im U @9.205,2.508
momi 1 @1.272,7.175
money A @-5.402,-1.375
nm U @9.252,0.566
policy 1 @-5.758,0.942
ppcvisit48 O @2.673,-3.004
ppmm U @9.300,-2.879
ref_int E @2.531,0.472
sigfunc 1 @-0.082,-1.970
sup_int E @3.576,1.694
trad_int E @3.671,7.175
train_int E @-0.082,4.137
trained 1 @-0.319,1.318
wg_int E @4.906,1.757
workers 1 @-2.599,0.848

```

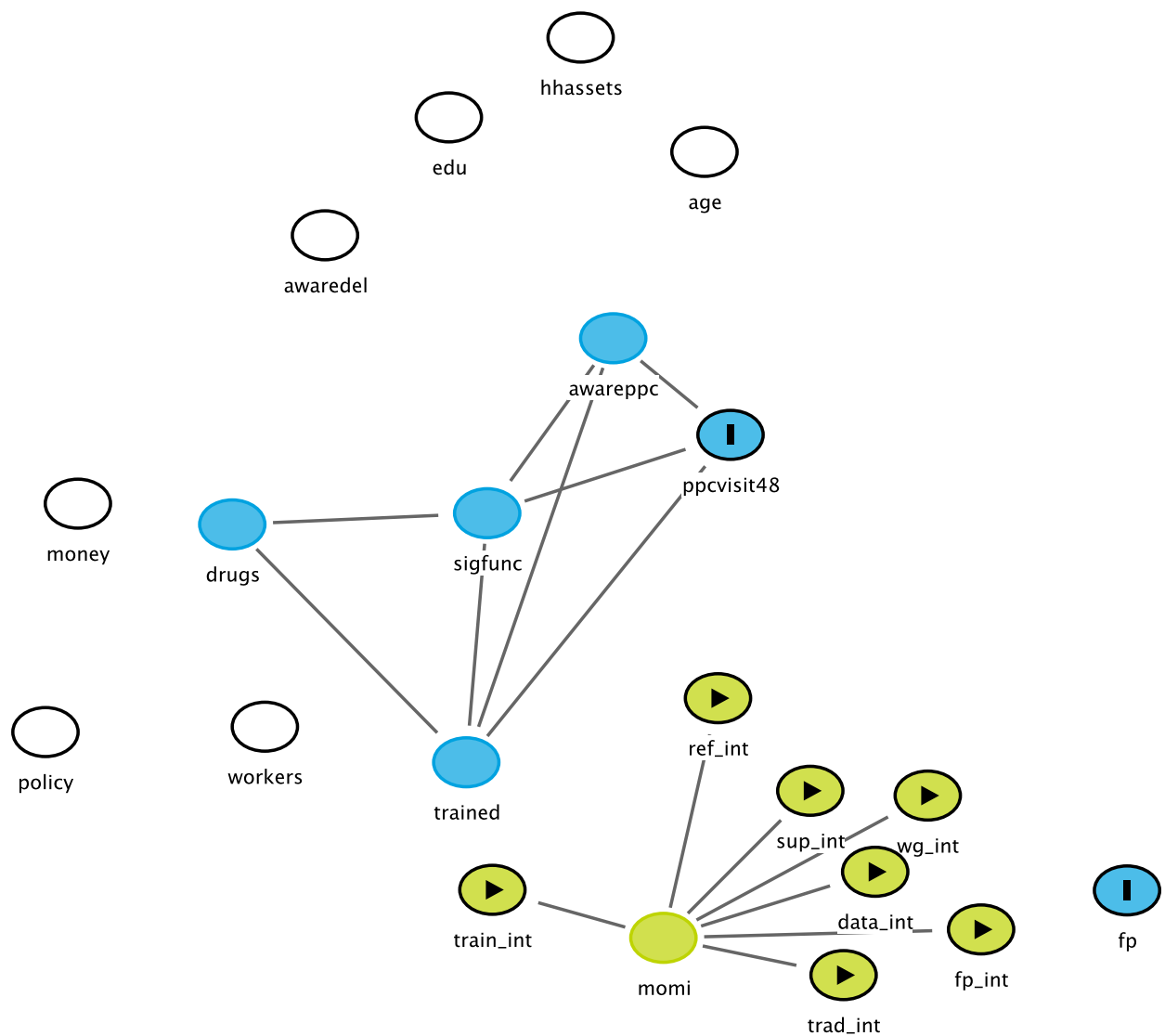
```

awareppc ppcvisit48
birthsp ppmm nm im
data_int awareppc
drugs sigfunc
engage_int policy
fp birthsp
fp_int fp
momi engage_int train_int ref_int sup_int wg_int data_int trad_int fp_int
policy drugs workers train_int
ppcvisit48 ppmm nm
ppmm nm
ref_int ppcvisit48
sigfunc ppcvisit48
sup_int ppcvisit48
trad_int awareppc
train_int trained
trained sigfunc ppcvisit48
wg_int awareppc
workers sigfunc train_int
*****end DAGitty code here*****

```

If we were to condition (adjust, set as A) on **policy** and **workers** we would also be able to estimate unbiased effects of the momi interventions on ppcvisit48. The only thing stopping us from doing this is the fact that via the originally specified causal pathway: **engage_int**→**policy** (see Step 1 DAG), **policy** and it's child: **workers**, become descendents of the E **engage_int**, which are we are not allowed to condition on (adjust for) as specified in Step 1. **Therefore one way of being able to estimate the effects of the other interventions on ppcvisit48 could be for MOMI to not to the policy engagement intervention!** If this were done then we could also adjust for **policy** and **worker** and our DAG would look like this:

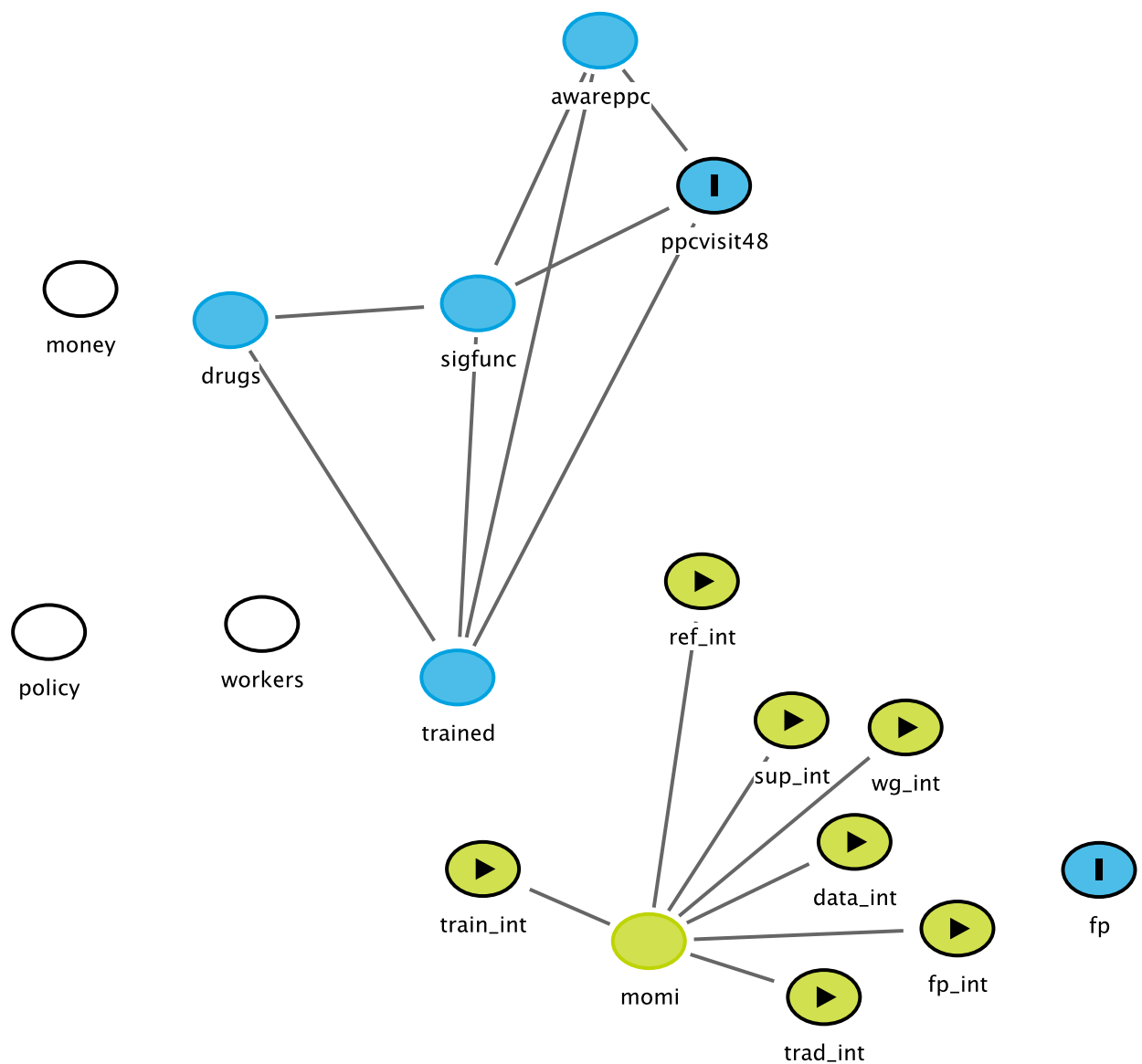
Step 6 DAG v2



leaving no pathways between our E (yellow) and our O (blue) meaning that our regression model would produce unbiased estimates of the causal relationships between each E and each O.

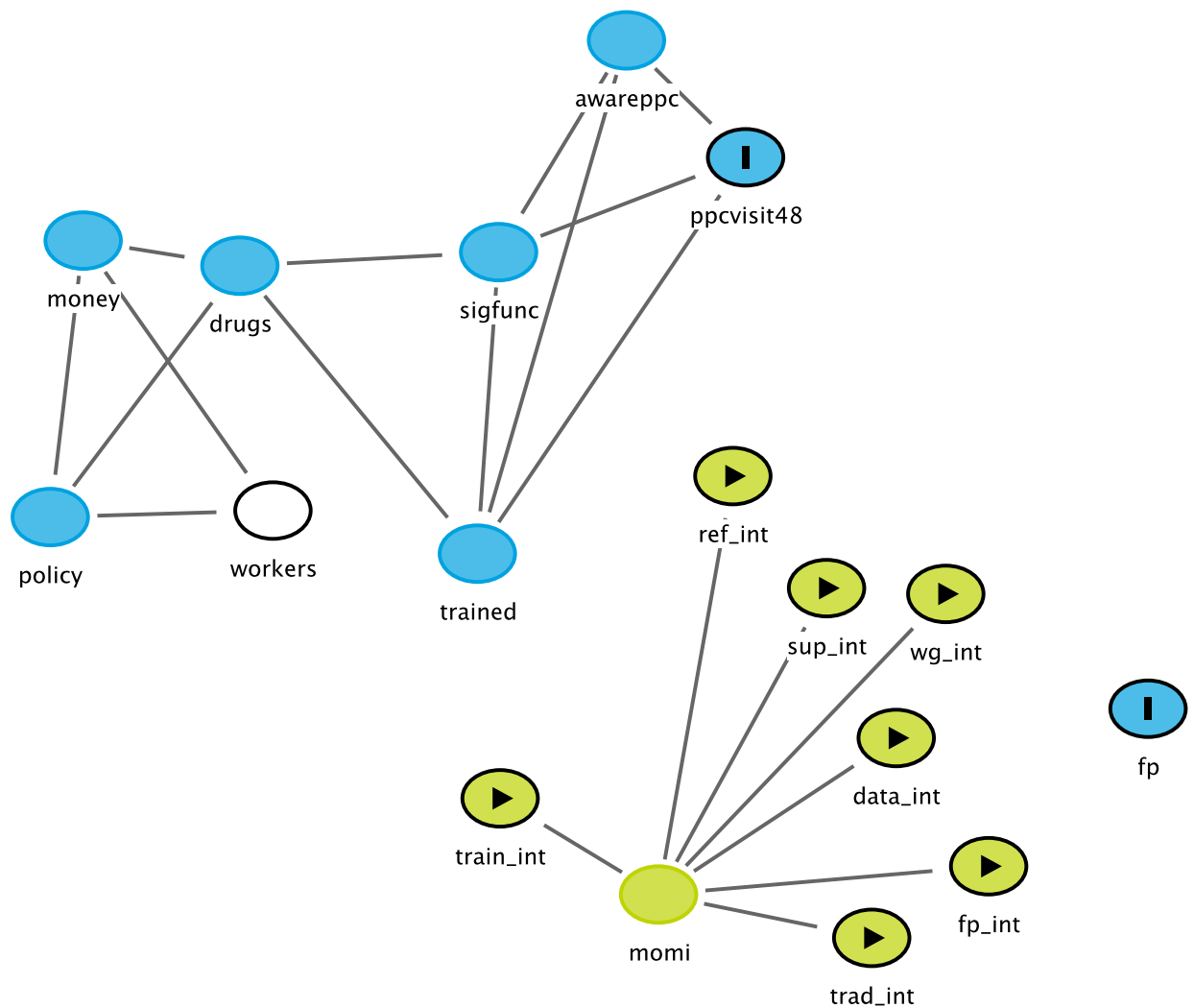
Actually given that the A variables **awaredel** **edu** **hhassets** and **age** (white nodes at the top) never had pathways from both exposure and outcome variables they need not be included as A variables and the DAG. When setting them to 1 (other variables) they disappear in Step 2, and the final Step 6 DAG now becomes:

Step 6 DAG v3



...and if you assume **money** is an other variable (1) at the outset (Step 1), then it becomes a blue ancestor of an outcome (parent of drugs) in the DAG; as does **policy** too if you also assume it to be an 'other' variable (a 1):

Step 6 DAG v4



note that we can't do the same for **workers** (it has to remain as A) because it is an ancestor of both an outcome ancestor (**sigfunc**) and an exposure (**train_int**).

The code for this final DAG is:

*****start DAGitty code here*****

```
age 1 @2.578,-8.485
awaredel 1 @-3.098,-5.729
awareppc 1 @1.345,-4.279
birthsp U @7.162,0.880
data_int E @4.353,3.328
drugs 1 @-2.968,-1.822
edu 1 @-1.459,-8.078
fp O @7.162,3.009
fp_int E @5.384,4.726
```


hfdel 1 @0.726,-5.823
 hhassets 1 @0.916,-9.675
 im U @9.205,2.508
 momi 1 @1.702,5.035
 money 1 @-4.716,-2.096
 nm U @9.252,0.566
 policy 1 @-5.083,0.919
 ppcvisit48 O @2.673,-3.004
 ppmm U @9.300,-2.879
 ref_int E @2.531,0.472
 sigfunc 1 @-0.082,-1.970
 sup_int E @3.576,1.694
 trad_int E @4.080,5.508
 train_int E @-0.065,3.986
 trained 1 @-0.319,1.318
 wg_int E @4.906,1.757
 workers A @-2.599,0.848

awareppc ppcvisit48
 birthsp ppmm nm im
 data_int awareppc
 drugs sigfunc
 fp birthsp
 fp_int fp
 momi train_int ref_int sup_int wg_int data_int fp_int trad_int
 money drugs workers
 policy drugs workers
 ppcvisit48 ppmm nm
 ppmm nm
 ref_int ppcvisit48
 sigfunc ppcvisit48
 sup_int ppcvisit48
 trad_int awareppc
 train_int trained
 trained sigfunc ppcvisit48
 wg_int awareppc
 *****end DAGitty code here*****

I think the relevant regression model could be a multivariate one with two outcomes (ppcvisit48 and fp; blue with lines) and 7 exposure variables (all the

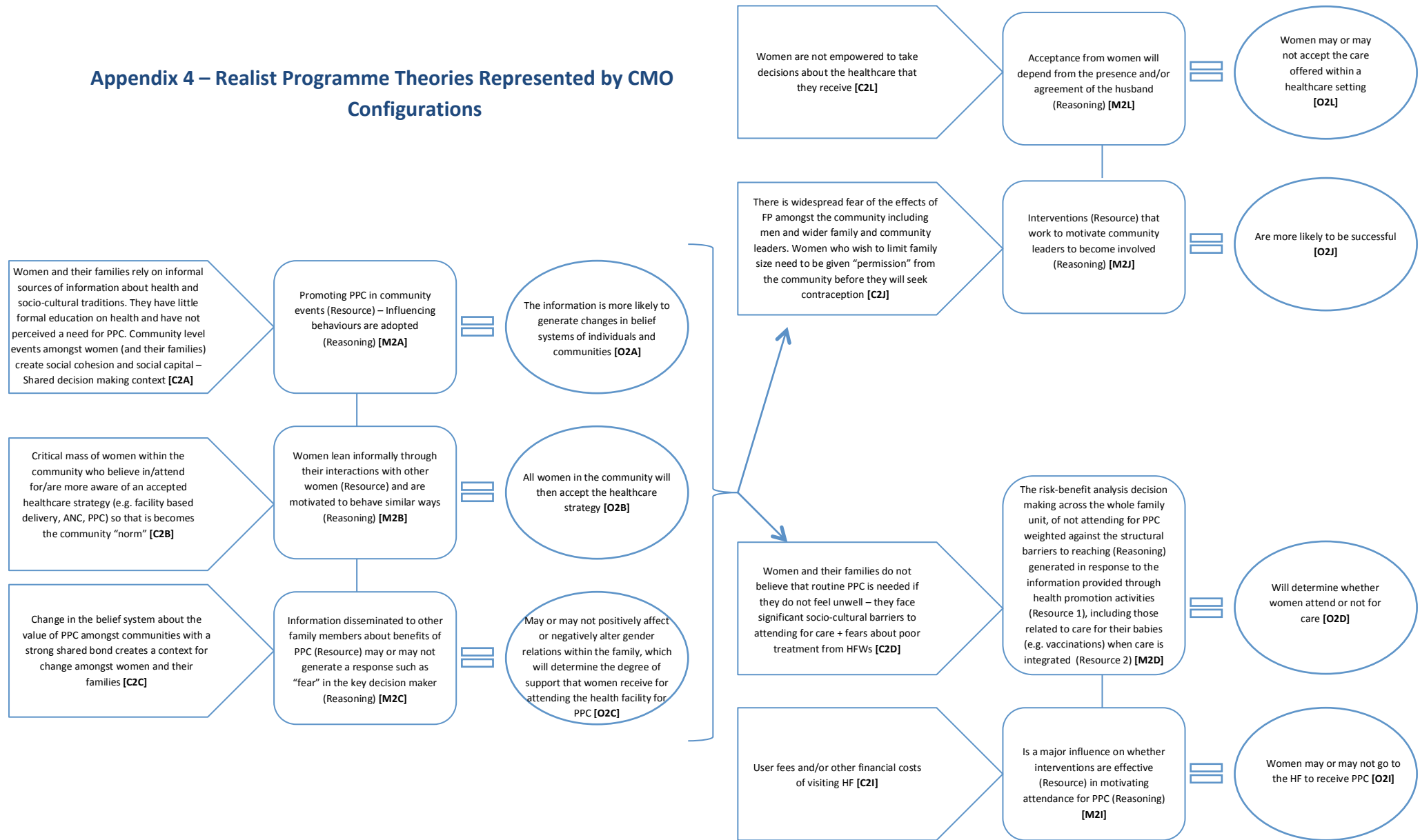
remaining _int variables after engage_int was removed; yellow with triangles) and the 1 remaining covariates (workers in white). I don't think the ancestors of outcomes (blue, no line) or ancestors of exposure (momi; yellow no line) need to be included in the model. In fact DAGitty says in it's right hand side panel that only workers is needed to adjust for the total effect of each of the 6 E on each of the two O (it says: "Minimal sufficient adjustment sets containing {workers} for estimating the total effect of data_int,fp_int,ref_int,sup_int,trad_int,train_int,wg_int on birthsp,ppcvisit48: {workers}"). The regression model (Stata code) for this estimation of total effects might look something like:

```
mvreg ppcvisit48 fp = train_int ref_int sup_int wg_int data_int fp_int trad_int workers
```

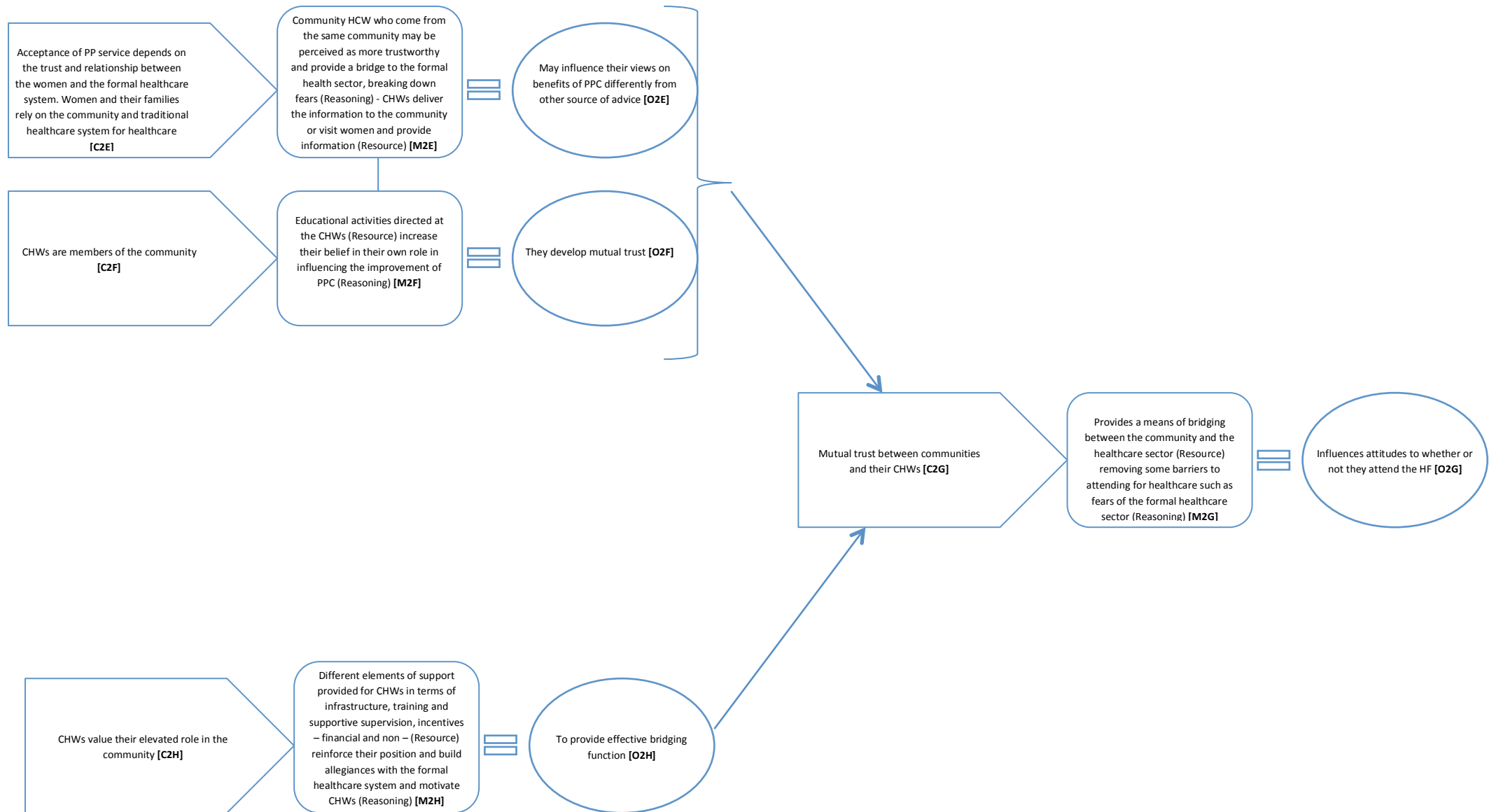
For the estimation of the direct effects of the 6 E on the 2 O the model would also need to include at least: awareppc fp trained (as DAGitty says: "Minimal sufficient adjustment sets containing {workers} for estimating the direct effect of data_int,fp_int,ref_int,sup_int,trad_int,train_int,wg_int on birthsp,ppcvisit48: {awareppc, fp, trained,workers}"). The regression model (Stata code) for this estimation of direct effects might look something like:

```
mvreg ppcvisit48 fp = train_int ref_int sup_int wg_int data_int fp_int trad_int awareppc fp trained workers
```

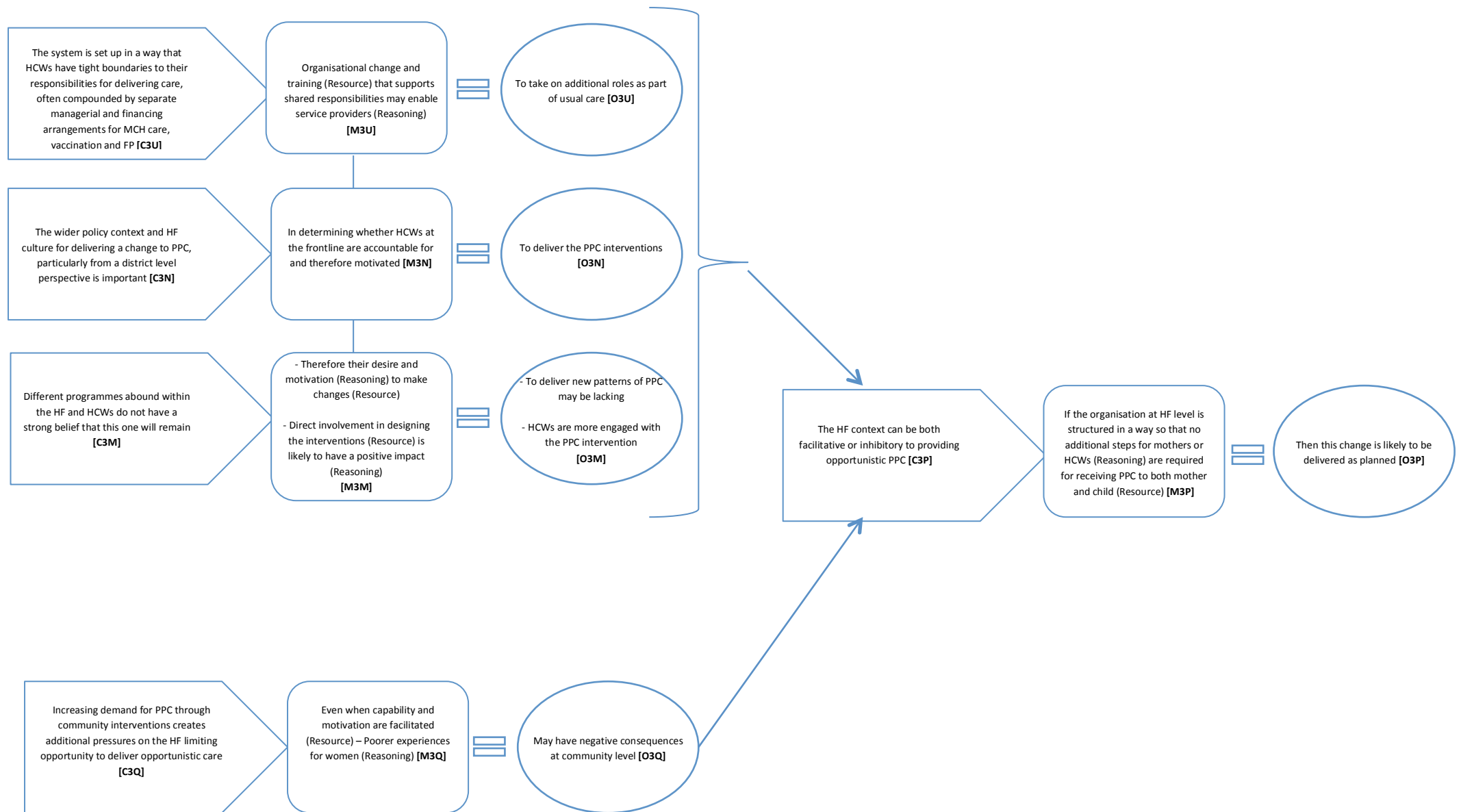
Appendix 4 – Realist Programme Theories Represented by CMO Configurations



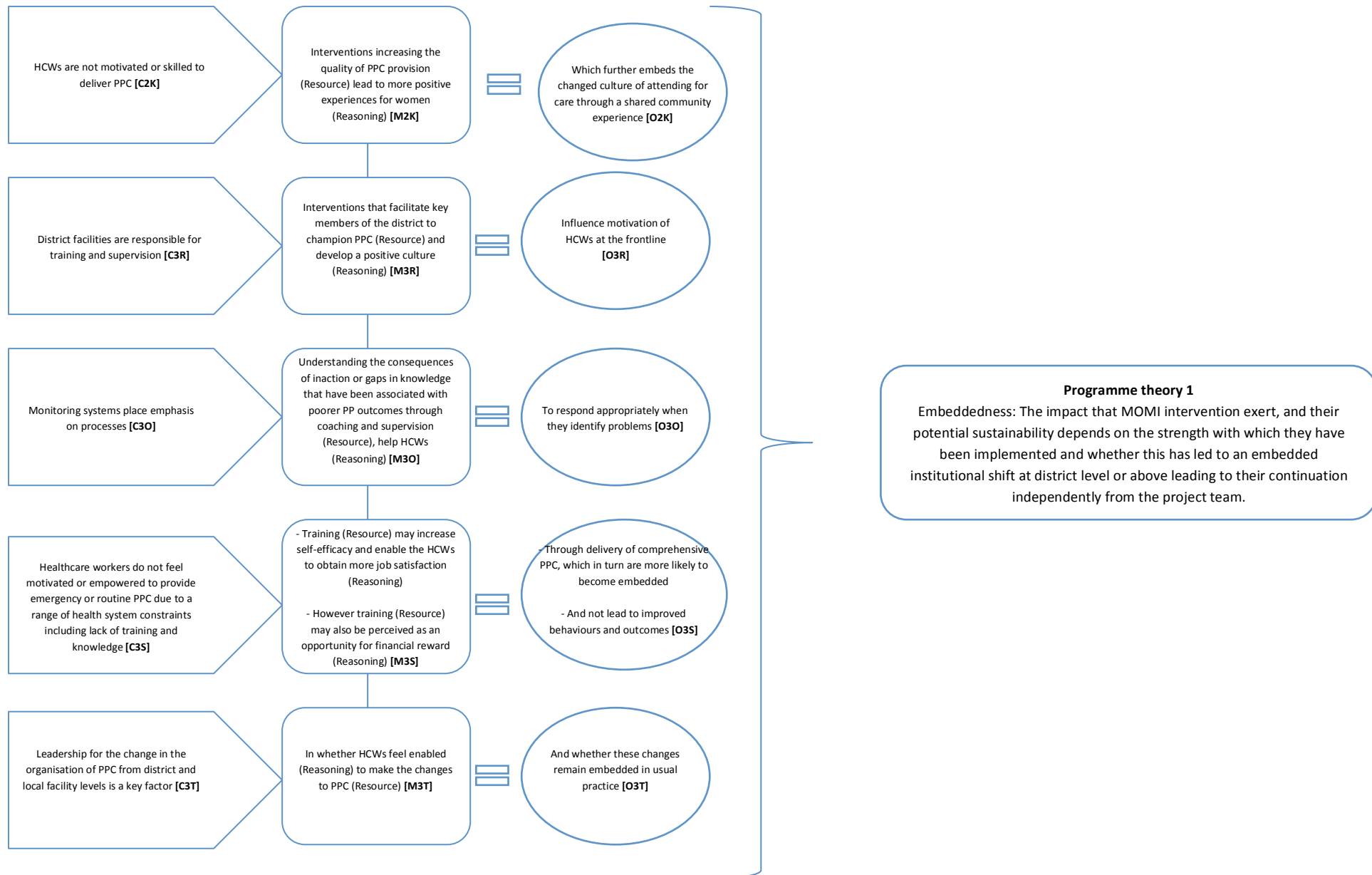
CMO Configurations – The link between
the community and the health facility



CMO Configurations – In the health facility



CMO Configurations – From the health facility to sustainability



Appendix 5 – Observation Template

Observation note ID:
Name of Researcher:
Date of Observation:
Case location (also indicate if it is a HF or a community observation):

PART I - Observations

OBSERVATION 1: HOW ARE THE MOMI INTERVENTIONS BEING IMPLEMENTED?

- 1.1 *Can you observe any evidence of the MOMI interventions that were identified in the logic model? Please describe the intervention(s), the degree of implementation and whether the intervention is part of routine care
(E.g.: Observation of HCW/CHW training, supervision, district management meeting, community meeting...)*
- 1.2 *Can you observe any PPC related activities that were not identified in the logic model? Please describe those activities and try to find out if they came about as an adaptation of a MOMI intervention or if they were inspired by the emphasis MOMI put on PPC*
- 1.3 *Describe an observation of routine postpartum care post facility delivery and outpatient postpartum care visits at 48 hours, 6 weeks and later*
- 1.4 *Try and observe and comment on processes for patients receiving routine care, emergency PPC, a neonatal vaccination appointment, attending for a postpartum complication, a routine outpatient visit and a family planning consultation.*

NOTES:

OBSERVATION 2A (IF OBSERVATION IS IN HF): WHAT FACTORS IN THE HEALTH CARE SETTING HELP OR HINDER THE IMPLEMENTATION?

2A.1 Human resources – are there enough staff, well enough trained?

2A.2 Availability of material resources

2A.3 Patient factors in the health facility (e.g. Uptake and acceptability, priority of infant...)

2A.4 How is the process organized and in what ways does this help or hinder implementation?

2A.5 In what ways has the structure been adapted to accommodate interventions?

2A.6 What are the general attitudes (HCW and women) towards postpartum care?

2A.6 What are the general attitudes (HCW and women) towards postpartum care?

OBSERVATION 2B (IF OBSERVATION IS IN THE COMMUNITY): WHAT FACTORS IN THE COMMUNITY SETTING HELP OR HINDER THE IMPLEMENTATION?

2B.1 Human resources – are there enough CHW, have they received enough training?

2B.2 Availability of material resources and incentives given to CHW (e.g. bikes, apron...)

2B.3 Patient factors in the community (e.g. Uptake and acceptability, priority of infant...)

2B.4 How is the process organized and in what ways does this help or hinder implementation?

2B.5 In what ways has the structure been adapted to accommodate interventions?

2B.6 What are the general attitudes (CHW and women) towards postpartum care?

2B.6 What are the general attitudes (CHW and women) towards postpartum care?

<p>OBSERVATION 3: WHAT ARE THE EXTERNAL FACTORS THAT HELP OR HINDER IMPLEMENTATION?</p> <p><i>3.1 What are the other competing factors that influence uptake of interventions?</i></p> <p><i>3.2 What are the patient payment structures and how well do these work?</i></p> <p><i>3.3 Are there other on-going NGO initiatives – do these help or hinder?</i></p> <p><i>3.4 What are the patient issues that influence uptake of care?</i></p> <p><i>3.5 How does the external policy drivers help or hinder uptake of postpartum care?</i></p> <p><i>3.6 Have you observed all the external context factors identified in logic model? Are there any factors that were overlooked in the logic model? Please comment.</i></p>
<p>NOTES:</p>
<p>OTHER RELEVANT OBSERVATIONS NOT COVERED BY 1-3</p>
<p>NOTES:</p>
<p>INFORMATION ACQUIRED THROUGH CONVERSATIONS WITH KEY INFORMANTS</p>
<p>NOTES:</p>

PERSONAL COMMENTS <i>Subjective comments of the researcher including inferences and personal observations, reflections and emotional reactions.</i>
NOTES:

PART II - POSTPARTUM CARE PROCESS MAPS

PPC PROCESS MAP – BASED ON THE LOGIC MODEL (i.e. what the PPC map should look like after MOMI implementation) <i>Try to visually conceptualise a PPC map based on your revised logic model and assumptions. Include the contextual factors that you have identified <u>before</u> the fieldwork, which might help or hinder implementation.</i> <i>You can ask other MOMI team members and stakeholders to comment on your PPC map.</i> <i>Only 1 map is required for all cases!</i>
PPC MAP:
PPC PROCESS MAP – BASED ONLY ON YOUR OBSERVATIONS AND INTERVIEWS (i.e. what the PPC map actually look in practice) <i>Create a PPC map based only on your observations and interviews. Include the contextual factors that you have identified <u>during</u> the fieldwork, which might help or hinder implementation.</i> <i>You can ask interviewees (or key informants) to comment on your PPC map after their interview.</i> <i>One map per case is required!</i>
PPC MAP:

Appendix 6 – Topic Guides

❖ Topic guide – *Community Health Workers*

Introductory Script (example):

We are interested in finding out more about the delivery of postpartum care in XX district. We would like to talk to you because we understand you are involved in this in some way. We are trying to collect views from as many different people as we can by asking some general questions. There are no right or wrong answers.

Check:

- | | |
|--|--|
| <input type="checkbox"/> Understanding | <input type="checkbox"/> Follow up plans |
| <input type="checkbox"/> Interview length – around 60 mins | <input type="checkbox"/> Consent taken |
| <input type="checkbox"/> Confidentiality and anonymity | <input type="checkbox"/> OK to record |
| <input type="checkbox"/> Withdrawal from study | <input type="checkbox"/> Any questions? |

Personal details:

Participant number			
Date			
Role in community (and/or health facility)			
Sex		Age	

Topic Guide

<u>Topic to focus on</u>	<u>Issues to explore</u>
Role in PPC delivery	<ul style="list-style-type: none"> ○ Describe role and responsibilities in PPC – explore extent and what limits this ○ Hours of work – How long they worked as CHW ○ What things might influence how well they can do this bit of the job ○ How do they develop and maintain skills ○ What is important for the community in terms of PPC? What works best? Why? ○ How do you think community sensitisations work? What works best? How do you know?
Providing PPC <i>Purpose of this question is to</i>	<ul style="list-style-type: none"> ○ Management of immediate post partum period <ul style="list-style-type: none"> - Usual care for those who deliver at home in postpartum period? <i>what, when and how long are they observed at home before going to the HF</i> - What happens if there are problems for the

<p><i>elicit if CHWs understand the areas of MOMI intervention, any difficulties with its implementation, how the intervention might have changed and whether the intervention is important/likely to making a difference</i></p>	<p>woman or baby? <i>Give examples</i></p> <ul style="list-style-type: none"> - Do all women receive care or only sometimes? - Have there been any changes in the last two years with post partum period management? ○ CHW visits <ul style="list-style-type: none"> - Describe the usual PPC visit schedule of women and their babies at their homes, what happens during these home visits? - What makes women accept home visits? - What are the most important things that happen during this visit? - Have there been any changes in the last two years with CHW visits? ○ Role of the CHWs in referring women for PPC <ul style="list-style-type: none"> - Does this happen? How often? What situations? What are the problems with this? - Have there been any changes in the last two years? ○ Views on PPC: is it considered to be important? <ul style="list-style-type: none"> - By the CHWs - By the community - Have they noticed any changes in the last two years? Does it make a difference in women's lives? - How is the pathway of PPC care experienced by the women – positives and negatives? What are the factors that influence attitudes of women to receiving care ○ Do you think that if CHWs stop their work, women would continue to go to HFs for postpartum care? Why? ○ What factors are needed for the replication of these activities in other places of the country?
<p>The CHW Role</p> <p><i>The purpose of this question is to establish whether the individual has and believes in their capabilities to execute the MOMI intervention and to explore relationships between CHWs, community and formal healthcare system</i></p>	<ul style="list-style-type: none"> ○ Relationship in community and background about experience of the CHW ○ How and why do CHWs do their job – Probe for motivations ○ Support and training received in the last two years – Did it help? What changed? ○ Ability (and belief in ability) to identify danger signs and to refer women and infants to HFs ○ Attitudes to and role between the community and the health facility (and district) ○ Attitudes to traditional system

	<ul style="list-style-type: none"> ○ Views of perceptions of women and the formal healthcare sector
Contextual factors	<ul style="list-style-type: none"> ○ What are the staffing needs to deliver PPC and the problems with these? ○ Describe current projects and presence of other NGOs particularly that may impact PPC? ○ What are the checks, incentives in place to insure PPC delivery? ○ How important is PPC compared with other areas of MNCH that also have to be delivered? ○ What would happen if someone didn't receive PPC as they are meant to? Would there be repercussions? ○ Who do you think is the person who leads most of the changes that happen in the community? Any contact with them? Thoughts about them? ○ How easy is it to implement the changes in PPC? Problems? What has been done to make it easier? (e.g.: <i>pictures book, availability checklists, reminders</i>) ○ Do you have feedback on how well you are doing in PPC – and how does this happen? Is it enough for you?

❖ Topic Guide - *Health facility workers*

Introductory Script (example):

We are interested in finding out more about the delivery of postpartum care in XX district. We would like to talk to you because we understand you are involved in this in some way. We are trying to collect views from as many different people as we can by asking some general questions. There are no right or wrong answers.

Check:

- | | |
|--|--|
| <input type="checkbox"/> Understanding | <input type="checkbox"/> Follow up plans |
| <input type="checkbox"/> Interview length – around 60 mins | <input type="checkbox"/> Consent taken |
| <input type="checkbox"/> Confidentiality and anonymity | <input type="checkbox"/> OK to record |
| <input type="checkbox"/> Withdrawal from study | <input type="checkbox"/> Any questions? |

Personal details:

Participant number	
Date	
Sex	Age
Role in health facility	

Topic Guide

<u>Topic to focus on</u>	<u>Issues to explore</u>
<p>Role of healthcare worker</p> <p><i>The purpose here is to understand the day-to-day work of the health worker and his/her position within the health system in relation to PPC</i></p>	<ul style="list-style-type: none"> ○ What is HCW roles and responsibilities? ○ Length of employment at health facility? ○ What is important to you about working here? ○ What does the day-to-day job entail? ○ Explore particularly in relation to PPC ○ Training and previous jobs, hours of work ○ Reporting responsibilities ○ Who are the other staff members and nature of relationships, job overlap? ○ Particular role in post partum care?
<p>Importance of PPC</p> <p><i>The purpose of this is to understand how HFWs value PPC and how this influences prioritisation and provision of PPC services.</i></p>	<ul style="list-style-type: none"> ○ Beliefs of healthcare worker in importance of postpartum care ○ Recent changes to PPC delivery and impacts of this on outcomes, effects on staff and other aspects of care ○ Any involvement of HCW in recent changes or deciding how PPC should be improved ○ Explore how postpartum care is viewed including in the context of other healthcare and other initiatives
<p>Providing PPC</p> <p><i>The purpose of this is to understand the actual roll out of activities/interventions on the ground</i></p>	<ul style="list-style-type: none"> ○ Explore knowledge of PPC and pathways for delivery – emergency and routine, different postpartum care schedules, probe for where and how it is delivered including vaccination clinics and other settings ○ Has anything changed in the last two years in the way this is done? ○ What are the most important things that happen during this visit? ○ What happens if there are problems for the woman or baby in PP period? <i>Give examples</i> ○ Do all women receive care or only sometimes? What is meant to happen? Does this always happen – what are the reasons why not? How could it be made easier? ○ What manuals or guidance do HCWs use for advice in the delivery of care? ○ How well do logistics work? ○ Are PPC services integrated with other types of care – when and how, recent development? Why are these delivered together? How has health facility been organized, if at all to make this easier? ○ How does this work and how could it be improved? ○ How is the pathway of PPC care experienced by the women – positives and negatives? What are the factors that influence attitudes of women to receiving care

	<ul style="list-style-type: none"> ○ Other things that help or hinder delivery of PPC in the health facility – eg explore finance initiatives, other ongoing NGO initiatives, policy directions etc? ○ What about postpartum family planning – when is this delivered, by who? ○ What different methods are available ○ What are you able to provide? ○ What are the barriers to different methods and women getting family planning ○ What are your views – when should women receive, best methods ○ What are you trained to do?
<p>Motivations of healthcare workers for PPC</p> <p><i>The purpose is to understand what drives HFWs to provide PPC services to their patients</i></p>	<ul style="list-style-type: none"> ○ Explore motivations of healthcare workers focusing on PPC delivery – how important, why, compare to other areas of MNCH care ○ What might be the impacts of improved postpartum care (beyond reducing mortality etc) ○ What areas of providing care do they enjoy? What is difficult? ○ Use examples from PPC ○ Where do they get support from when things are difficult? ○ Who makes decisions in the health facility when there is a problem? ○ Can and do they take responsibility for decision-making themselves?
<p>Training and supervision of healthcare workers in PPC</p> <p><i>The purpose is to understand the level of the support systems available to improve capability of HFWs for providing PPC services.</i></p>	<ul style="list-style-type: none"> ○ Explore attitudes to training in general - what is needed, why is it useful, what does it lead to, examples of how it directly leads to new learning and improved care ○ Training received in PPC recently, content and relationship to what was needed ○ How was the training organised in relation to duties at HF, how were other people in HF trained, what about new staff? ○ Experiences and impacts of training in PPC - what has been learned, how has this influenced what has been done differently – explore impact and confidence and competence. Give examples where possible ○ What about supervisions? Do they include PPC? Describe the process – how often, what and what is the impact? ○ How do they help or hinder the care provided? How do they feel about them? ○ Enumerate ongoing networks of support and personal development, coaching, supervision and mentorship for PPC – how do these activities influence PPC that is delivered.

	<ul style="list-style-type: none"> ○ How else do HCW get support? What would they do if they could not manage a PP problem in the health facility
Relationships within healthcare system	<ul style="list-style-type: none"> ○ Describe interactions and relationships with district management team ○ Describe relationships with CHWs – how does this support PPC delivery ○ Describe other current projects in the health facility and the presence of other NGOs/other funding sources particularly that may impact PPC? How?
Factors affecting implementation	<ul style="list-style-type: none"> ○ What is expected in terms of PPC delivery within the organization? ○ What are the checks, incentives in place eg importance of data or supervision, visits by DMO, data requirements, audit and feedback etc ○ What sort of things do you think make people think its important to deliver PPC “well” ○ What would happen if someone didn’t receive PPC as they are meant to? Would there be repercussions? ○ Who do you think is the person who leads most of the changes that happen in the HF? Any contact with them? Thoughts about them? ○ How easy is it to implement the changes in PPC – what are the problems that affect delivery – what has been done to make it easier – eg <i>probe time, staffing, availability checklists, reminders</i>
Needs of community	<ul style="list-style-type: none"> ○ What is important for the community in terms of PPC? ○ How does this need to change? ○ How could this happen? ○ How do you think community sensitisations work? What works best? How do you know? Has this improved? How? What are the difficulties

❖ Topic guide – *postpartum women from community and health facility*

Introductory Script (example):

We are interested in finding out more about the delivery of postpartum care in XX district. We would like to talk to you because we understand you have received postpartum care in some way (via the health facility or via community health workers). We are trying to collect views from as many different people as we can by asking some general questions. There are no right or wrong answers.

Check:

- | | |
|--|--|
| <input type="checkbox"/> Understanding | <input type="checkbox"/> Follow up plans |
| <input type="checkbox"/> Interview length – around 60 mins | <input type="checkbox"/> Consent taken |
| <input type="checkbox"/> Confidentiality and anonymity | <input type="checkbox"/> OK to record |
| <input type="checkbox"/> Withdrawal from study | <input type="checkbox"/> Any questions? |

Personal details:

Participant number	
Date	
Age	
Previous number of deliveries	
Date of most recent delivery	
Facility or home delivery	
Complications in delivery (if yes, specify)	

Topic Guide

<u>Topic to focus on</u>	<u>Issues to explore</u>
Individual experience and importance of PPC	<ul style="list-style-type: none"> ○ Understanding the woman's experience and perspective of formal and traditional health care services ○ Choices and experiences for ANC, delivery and PPC (<i>focus on PPC</i>) ○ Views on PPC: <ul style="list-style-type: none"> - Views on need for PPC, what is important and why - What situations would encourage them to seek PPC - What are the barriers or facilitators to receiving PPC ○ Influences on women's decision making regarding healthcare decisions (<i>probe around community leaders, husbands, other family members, community, neighbours</i>) ○ Explore attitudes and beliefs of women about formal healthcare workers and the system ○ Adequacy of health interventions to women needs and reproductive and health concerns ○ Does PPC fit with the local needs and structures? ○ Perceived benefits and costs of PPC ○ Have there been any changes in individual behaviours and attitudes towards PPC and FP?
Role of community and community interventions in PPC	<ul style="list-style-type: none"> ○ Relationship in community – contacts, support networks, women's groups ○ Beliefs and motivations about PPC in the community

	<p>(friends/neighbours/men)</p> <ul style="list-style-type: none"> ○ What kinds of experiences have people they know had? How does that make them feel ○ Identify decision-makers in the community ○ Probe for the content of community events/health events: <ul style="list-style-type: none"> - How did the community respond to those events - Did the events have an impact on attitudes to PPC
CHW home visit for PPC	<ul style="list-style-type: none"> ○ Probe into CHW's relationships: <ul style="list-style-type: none"> - With individual - With the community - With both the traditional and formal healthcare system - Probe into factors that influence relationship positively and negatively ○ Role of CHW in PPC delivery ○ Experience of home visits ○ Is the community supportive of CHW ○ Impact of CHW visit – Influence of beliefs, understanding and motivations for PPC ○ If the woman did not receive a CHW visit: probe on the reasons why the woman was not visited
Family Planning	<ul style="list-style-type: none"> ○ What are the common beliefs around FP? How is FP viewed by: <ul style="list-style-type: none"> - The individual - The community - The men ○ What was done regarding FP in the post partum period and how the decision was taken <ul style="list-style-type: none"> - What was done by the individual - By the family - By the CHW

❖ **Topic Guide - PAB members/District/Provincial Health Team**

Introductory Script (example):

We are interested in finding out more about the delivery of postpartum care in XX district. We would like to talk to you because we understand you are involved in this in some way. We are trying to collect views from as many different people as we can by asking some general questions. There are no right or wrong answers.

Check:

- | | |
|--|--|
| <input type="checkbox"/> Understanding | <input type="checkbox"/> Follow up plans |
| <input type="checkbox"/> Interview length – around 60 mins | <input type="checkbox"/> Consent taken |
| <input type="checkbox"/> Confidentiality and anonymity | <input type="checkbox"/> OK to record |
| <input type="checkbox"/> Withdrawal from study | <input type="checkbox"/> Any questions? |

Personal details:

Participant number	
Date	
Work Institution	
Involvement on MOMI project (e. g. PAB member, member of District Health supervision team)	

Topic Guide

Topic to focus on	Issues to explore
<p>Describe changes to postpartum care delivery over last 2 years – what and how</p> <p><i>Purpose of this question is to elicit if stakeholders are aware of the MOMI project, its aims and the intervention components</i></p>	<p>Describe (policy, district, health facility and community level changes as relevant to interviewee)</p> <p>Prompt for each intervention within your site – eg new trainings, supervisions, PP FP</p> <ul style="list-style-type: none"> ○ What strategic level change have been made – eg plans, policies ○ Why were the changes made? ○ What were they intended to achieve? – eg improve attendances, opportunistic care ○ Have they achieved this aim? – how and why? ○ How did the changes come about? – what had to happen, which individuals were involved, what policy changes supported this etc ○ How has this affected health system eg organising extra training etc ○ Barriers and opportunities to change ○ What has improved – anything that has got worse? – assess views, problems, alternative ways of addressing problems, costs incurred or saved by the interventions

<p>Awareness of particular interventions: <i>This question is designed to understand more about the impact of specific MOMI interventions at policy and strategic level</i></p> <p>Training and supervisions interventions</p> <p>Guidelines and checklists</p> <p>Change in HCW roles</p> <p>Integration of PPC with vaccination</p> <p>PPFP Delivery</p>	<ul style="list-style-type: none"> ○ Training organised at district/provincial level in PPC? Changes to routine supervisions to include PPC? What new trainings have been organised How do new staff receive training ○ What guidelines exist at national, provincial and district level – when updated, how disseminated and used ○ Investigate role change in PPC – changed roles for CHWs, HFWs eg integrated roles – how have they changed, what is the role of the District in these changes ○ How is care for mother and baby organised together in HF or community – explore changes, new pathways of care, staff changes, physical changes to clinic Barriers and opportunities ○ Changes in PPFP delivery – what and how? Barriers and opportunities, changes, successes
<p>Different roles in changes to postpartum care delivery</p> <p><i>Purpose of this question is to elicit if stakeholders were involved on MOMI activities and if so, who and to what extent and whether interventions are likely to continue without MOMI team</i></p>	<ul style="list-style-type: none"> ○ Own involvement in changes in postpartum care delivery? <i>Specific activities eg participation in meetings, visits to HFS and community activities, involvement with intervention development, etc.</i> Involvement in the future – <i>likely continuation</i> Feelings about role/ participation in PPC?- <i>importance of PPC</i> ○ Who else has been involved in changes in PPC? Most influential people? How? <i>key policy makers, leadership figures, MOMI team and HCWs and key local figures in the community (which of these might it also be important to interview?)</i> <i>Will their involvement continue in the future</i>
<p>Fit of the intervention</p> <p><i>Purpose of this question is to elicit whether the MOMI interventions were a good fit with the policy and other directions</i></p>	<ul style="list-style-type: none"> ○ How do changes to PPC fit with other changes in MNCH or broadly in healthcare that are happening? ○ What do you know about government or local policies on implementing postpartum care? Are governments supportive? ○ What other policies support this initiative?

	<ul style="list-style-type: none"> ○ Prompt policy directions, political change, other NGO work, community behaviours ○ What might be some of the barriers?
Views of PPC <i>The purpose of this question is to understand stakeholder views on whether the intervention is important/likely to making a difference</i>	<ul style="list-style-type: none"> ○ Is PPC considered important – why? Probe for comparisons with ANC, intrapartum care ○ How might this make a difference to care of the woman and neonate? Try and move beyond improving health and reducing mortality e.g. what problems might be identified, how will this change specific outcomes? Can it make a difference?
Continuation of MOMI activities <i>The purpose of this question is to understand if stakeholders feel that practices implemented by MOMI will continue after the project ends.</i>	<ul style="list-style-type: none"> ○ Support for PPC activities to continue – what is in place to enable their continuation ○ How important is this and why? ○ What might prevent continuation?
Dissemination of MOMI interventions <i>The purpose of this question is to understand if stakeholders feel that MOMI interventions are specific for this District or if they can be implemented at national level.</i>	<ul style="list-style-type: none"> ○ What are the differences in PPC across other districts and regions? ○ Is the approach here one that could or should be implemented in the entire country? ○ Factors needed for the replication of the interventions in other places of the country?

❖ Topic guide: *MOMI team members*

Introductory Script (example):

We are interested in finding out more about the implementation of MOMI activities in XX district. We would like to talk to you because you have been involved in the design and/or the implementation of MOMI activities. We are trying to collect views from as many different people as we can by asking some general questions. There are no right or wrong answers.

Check:

- | | |
|--|--|
| <input type="checkbox"/> Understanding | <input type="checkbox"/> Follow up plans |
| <input type="checkbox"/> Interview length – around 60 mins | <input type="checkbox"/> Consent taken |
| <input type="checkbox"/> Confidentiality and anonymity | <input type="checkbox"/> OK to record |
| <input type="checkbox"/> Withdrawal from study | <input type="checkbox"/> Any questions? |

Personal details:

Participant number	
Date	
Work Institution	
Exact function on MOMI team	

Topic Guide

Topic to focus on	Issues to explore
<p>Implementation of MOMI interventions</p> <p><i>Purpose of this question is to understand what has been implemented, how the interventions have been implemented and what changes were observed after implementation</i></p>	<ul style="list-style-type: none"> ○ Which are the MOMI interventions implemented in your study site? ○ Were the interventions of easy or complex implementation? Why? ○ Have interventions been implemented as intended? <ul style="list-style-type: none"> - Probe for barriers encountered and how they have been addressed - Probe for facilitators to implementation and how they have been used ○ Did you made adaptations to the interventions for a better implementation? If yes, which changes were made? ○ Are MOMI interventions part of the National/District Health Plan? Were they already part of this plan or its integration was after MOMI implementation? ○ What positive and negative changes did you see after MOMI implementation until now? <i>At health facilities and community level.</i>
<p>Involvement of other Institutions</p> <p><i>Purpose of this question is to identify who has been involved in the implementation and to understand communication patterns between actors involved in implementation</i></p>	<ul style="list-style-type: none"> ○ Can you describe all the people who are involved in putting the interventions in place at all levels? <ul style="list-style-type: none"> - National, district, MOMI team, health facility and community ○ What are their roles in the implementation of interventions? <ul style="list-style-type: none"> - Specify for each one: HFWs, CHWs/TBAs, district team, MOMI team, stakeholders, PAB members ○ How is communication and collaboration between all? Probe in particular for relationship: <ul style="list-style-type: none"> - Between MOMI team members and District Health Team - Between HFW and CHWs - Between HFWs and community - Between CHWs and community - Between District Health Team and HFWs /CHWs ○ Who made the supervision and training to HFWs and CHWs? How does new staff receive training?
<p>Views of PPC</p> <p><i>The purpose of this question is to understand whether the intervention is important/likely to making a difference</i></p>	<ul style="list-style-type: none"> ○ Is PPC considered important? Why? <i>Probe for comparisons with ANC, intrapartum care</i> ○ How might this make a difference to care of the woman and neonate? <i>Try and move beyond improving health and reducing mortality e.g. what problems might be identified, how will this change specific outcomes? Can it make a difference?</i> ○ What evidence is there that national, policy or district teams believe in the value of PPC?
<p>Continuation of MOMI activities</p>	<ul style="list-style-type: none"> ○ To what degree are the interventions mainstreamed as part of the regular planning cycles and frameworks? ○ Support for PPC activities to continue – what is in place to enable

<p><i>The purpose of this question is to understand if MOMI team members feel that practices implemented by MOMI will continue after the project ends.</i></p>	<p>their continuation?</p> <ul style="list-style-type: none"> ○ How important is this and why? ○ What are the essential factors to continue PPC activities? ○ What might prevent continuation? ○ What do you think will happen when MOMI ends? Why? <i>Probe for the team member personal opinion</i>
<p>Dissemination of MOMI interventions</p> <p><i>The purpose of this question is to understand if stakeholders feel that MOMI interventions are specific for this District or if they can be implemented at national level.</i></p>	<ul style="list-style-type: none"> ○ What are the differences in PPC across other districts and regions? ○ Is the approach here one that could or should be implemented in the entire country? ○ Factors needed for the replication of the interventions in other places of the country?

Appendix 7 – Monitoring Data Graphs – By Facility

Burkina Faso:

Figure A7.1: Post-Partum Haemorrhage by month by facility in Burkina Faso

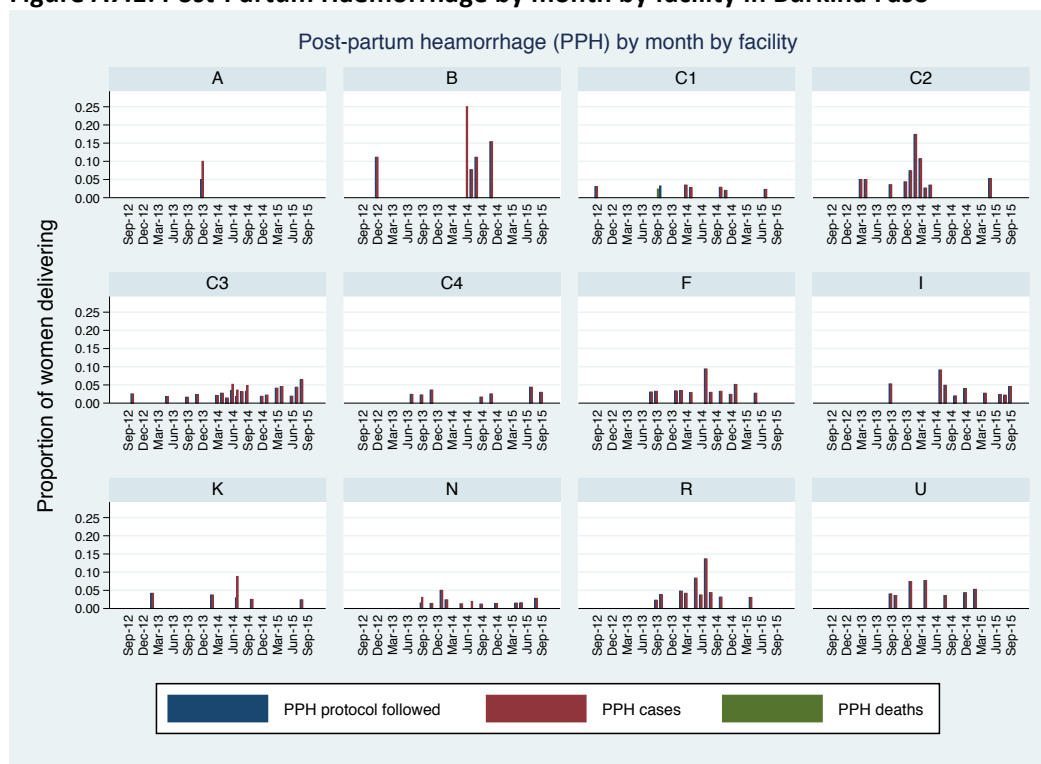


Figure A7.2: Post-Partum Sepsis by month by facility in Burkina Faso

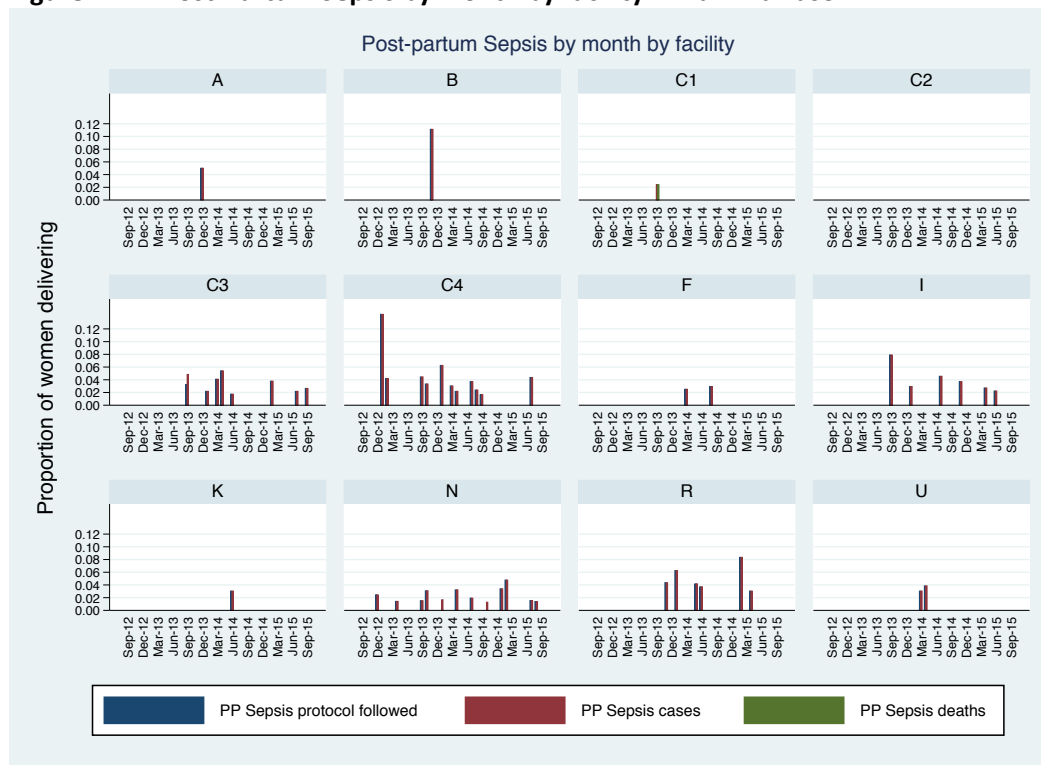


Figure A7.3: Post-Partum Anaemia by month by facility in Burkina Faso

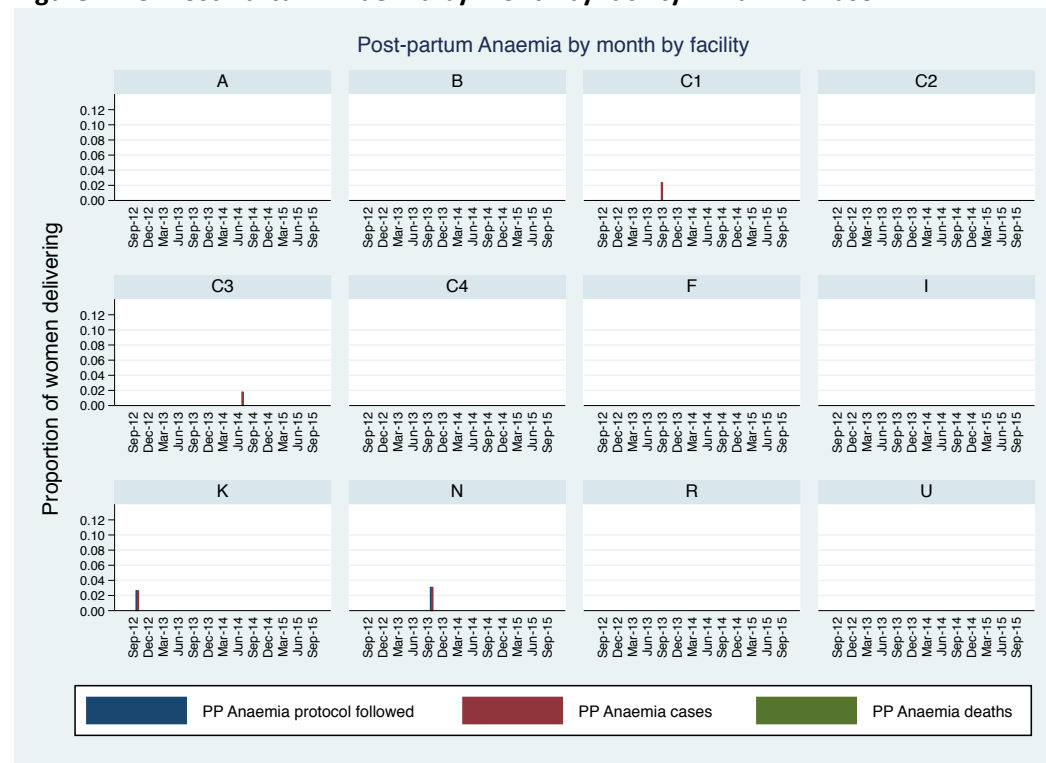


Figure A7.4: Newborn fever or low temperature by month by facility in Burkina Faso

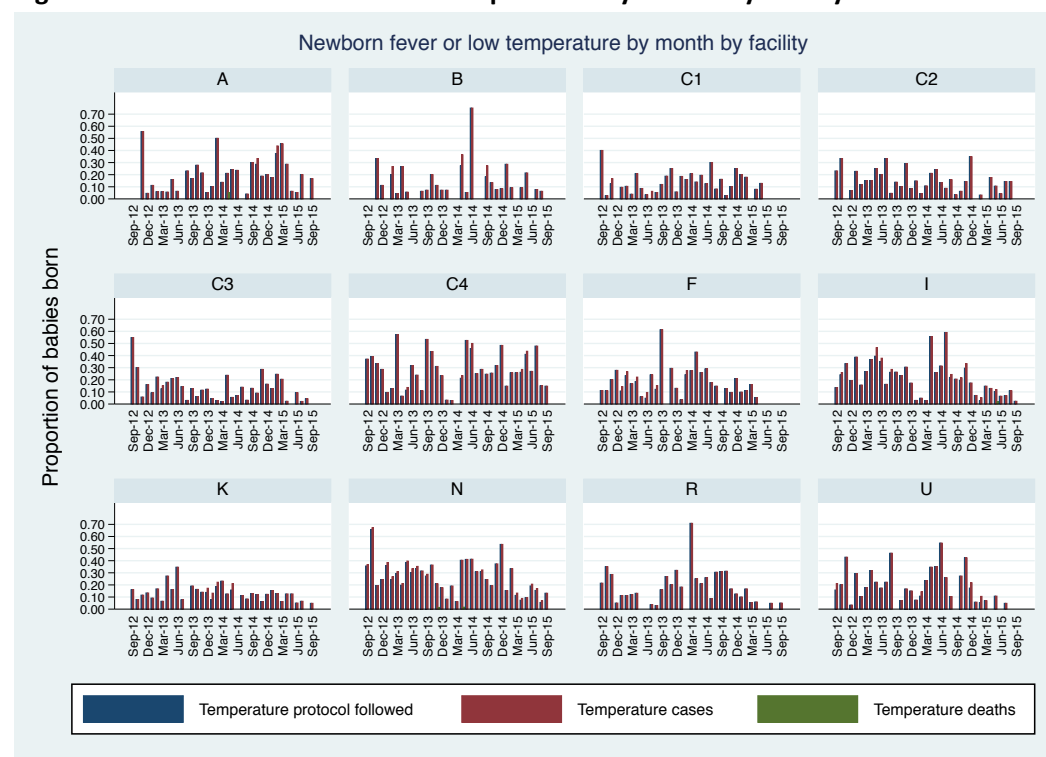


Figure A7.5: Newborn prematurity by month by facility in Burkina Faso

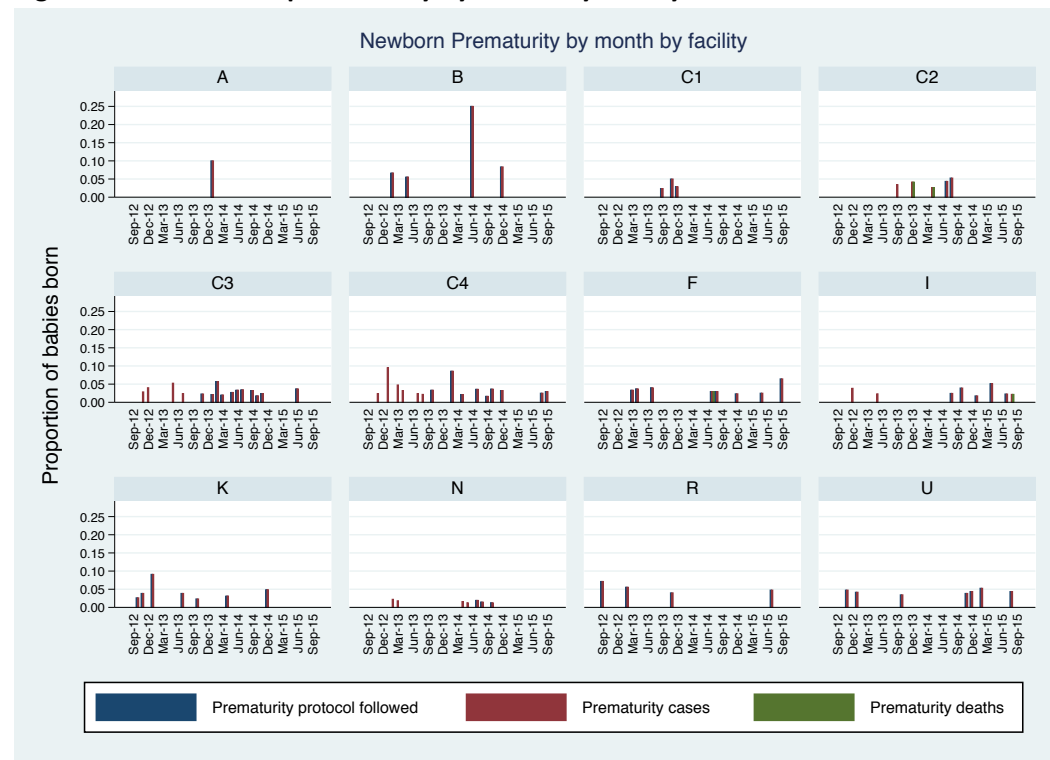


Figure A7.6: Post-Partum Family Planning (PPFP) by month by facility in Burkina Faso

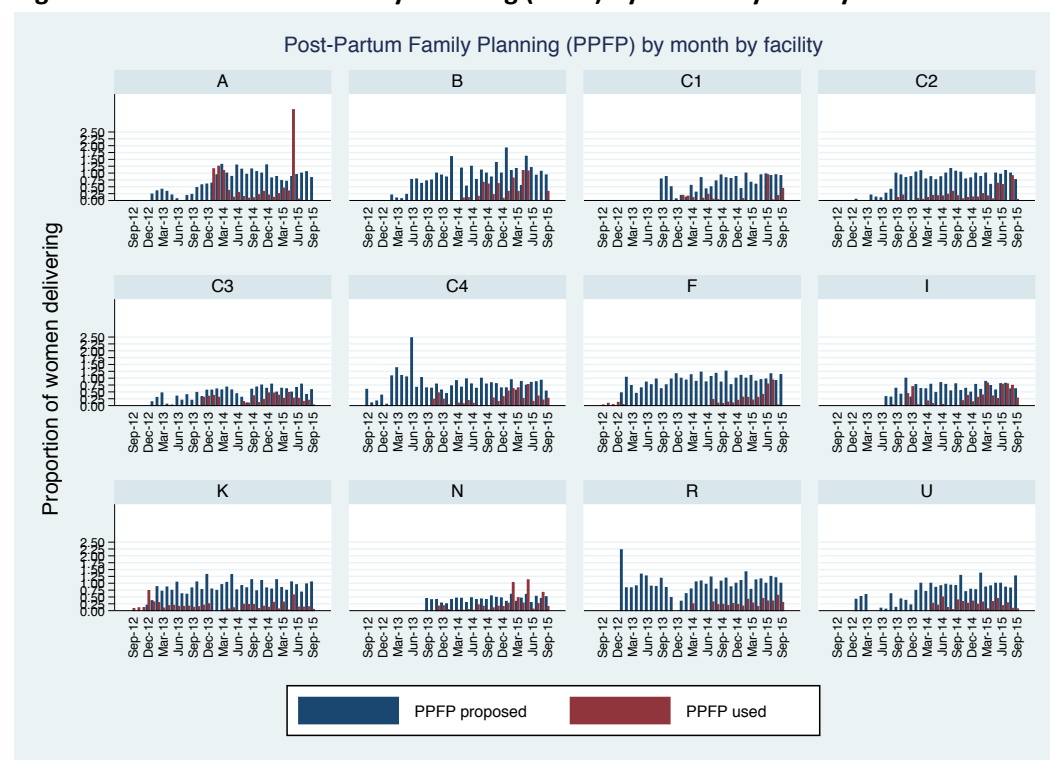
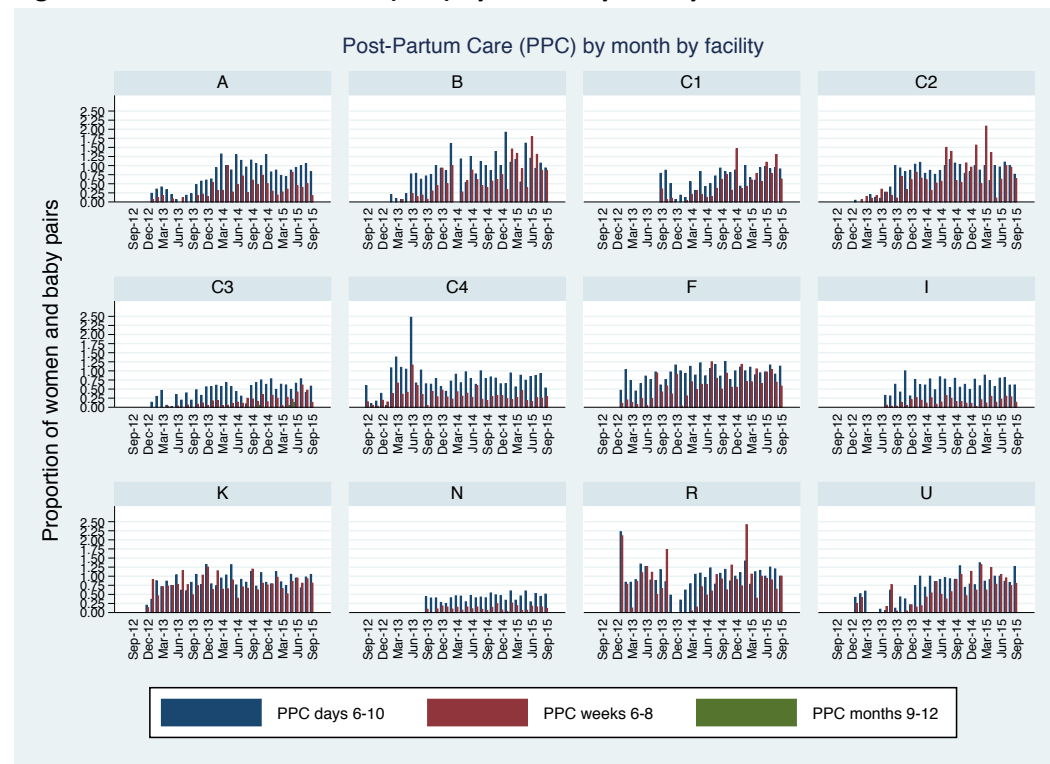


Figure A7.7: Post-Partum Care (PPC) by month by facility in Burkina Faso



Kenya

Figure A7.8: Post-Partum Care (PPC) by month by facility in Kenya

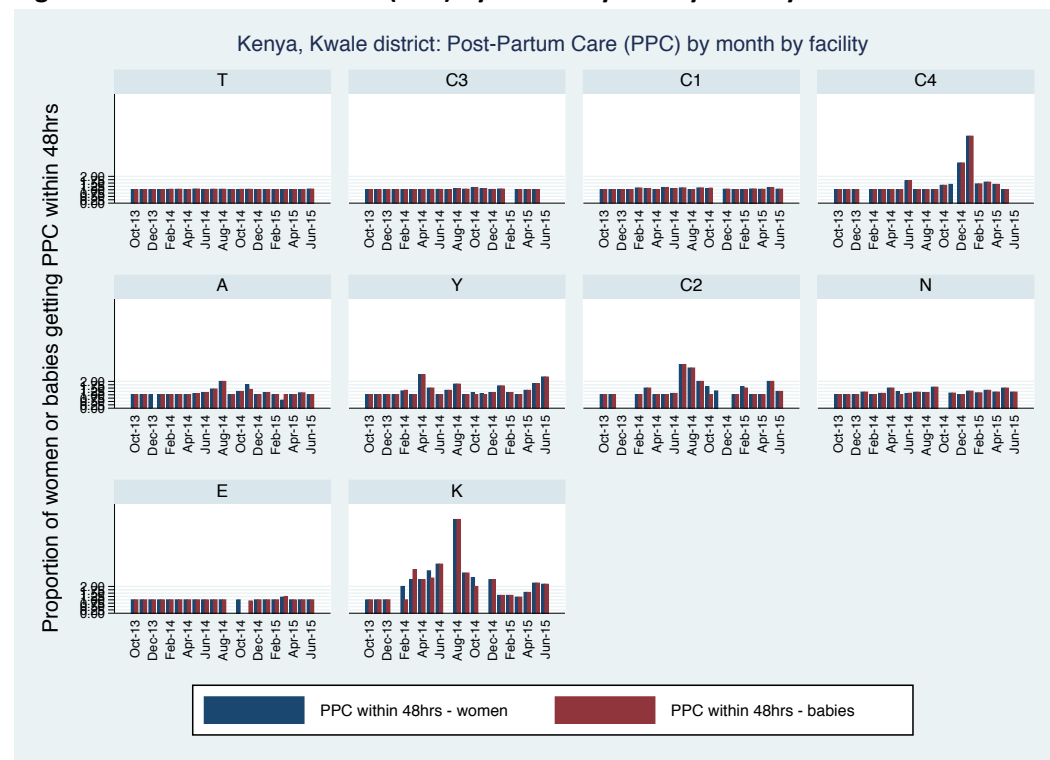


Figure A7.9: Maternal complications by month by facility in Kenya

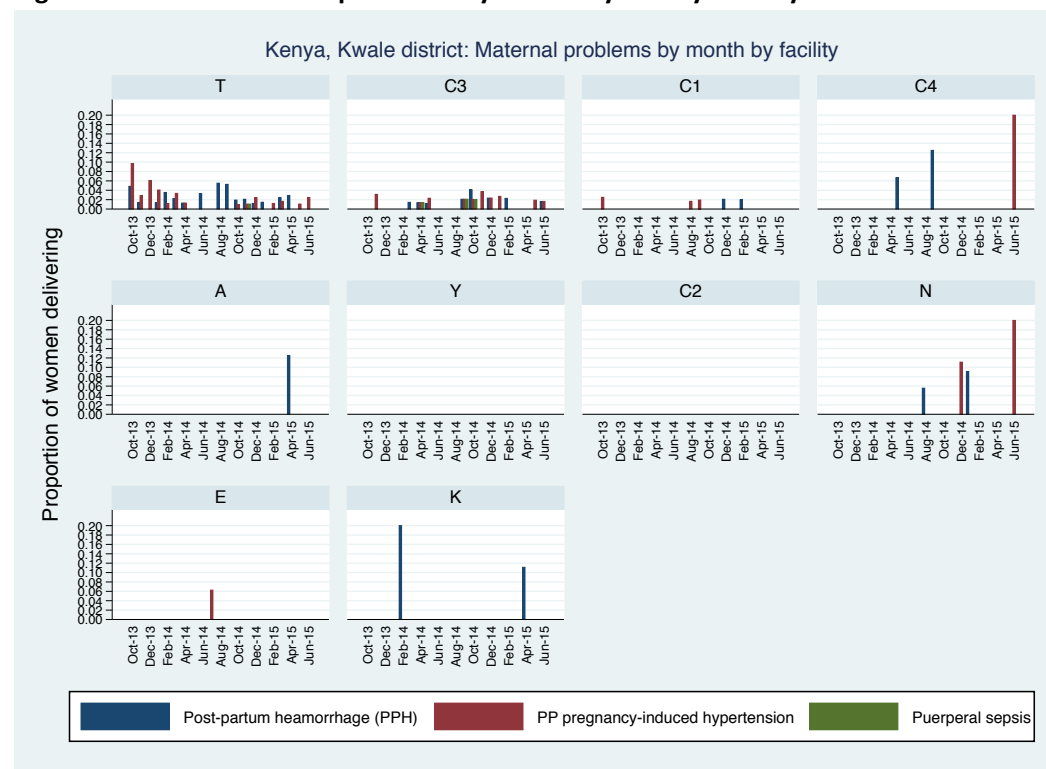


Figure A7.10: Neonatal complications by month by facility in Kenya

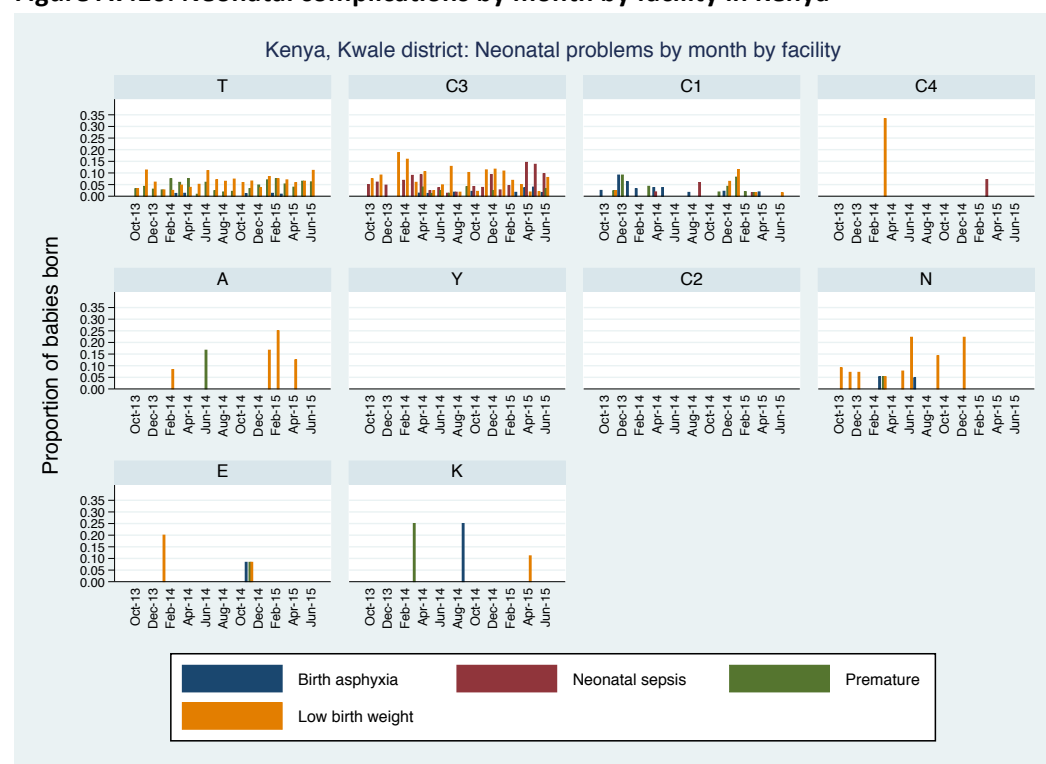


Figure A7.11: Maternal and neonatal deaths by month by facility in Kenya

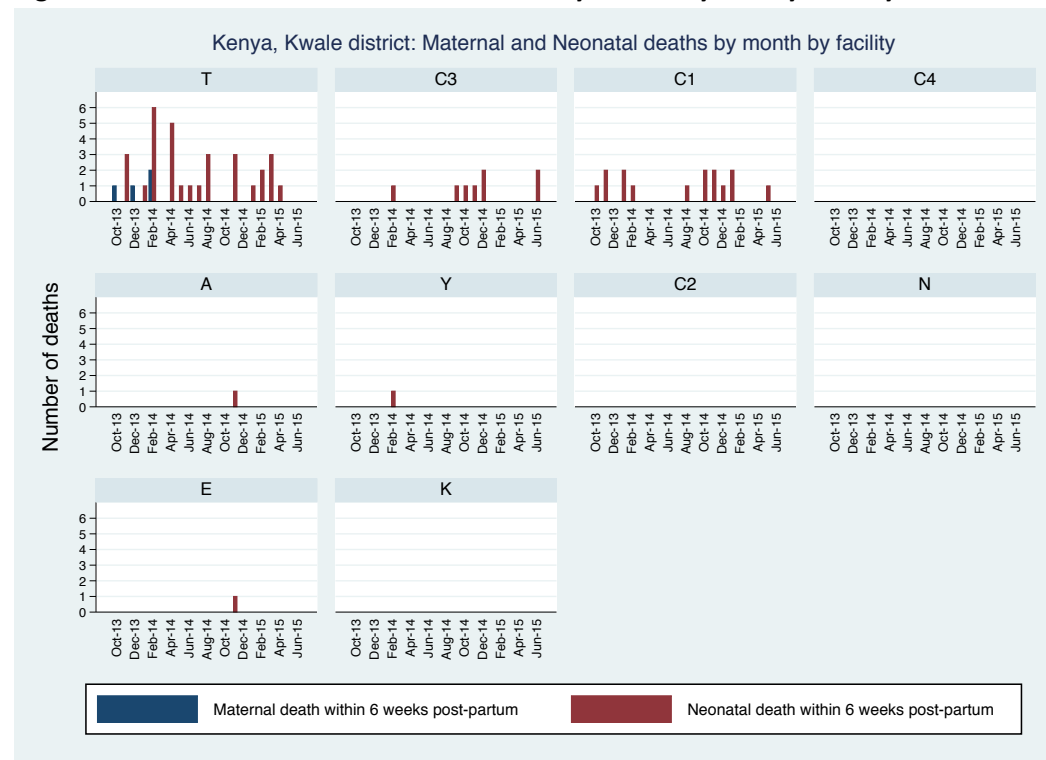


Figure A7.12: Family Planning by month by facility in Kenya

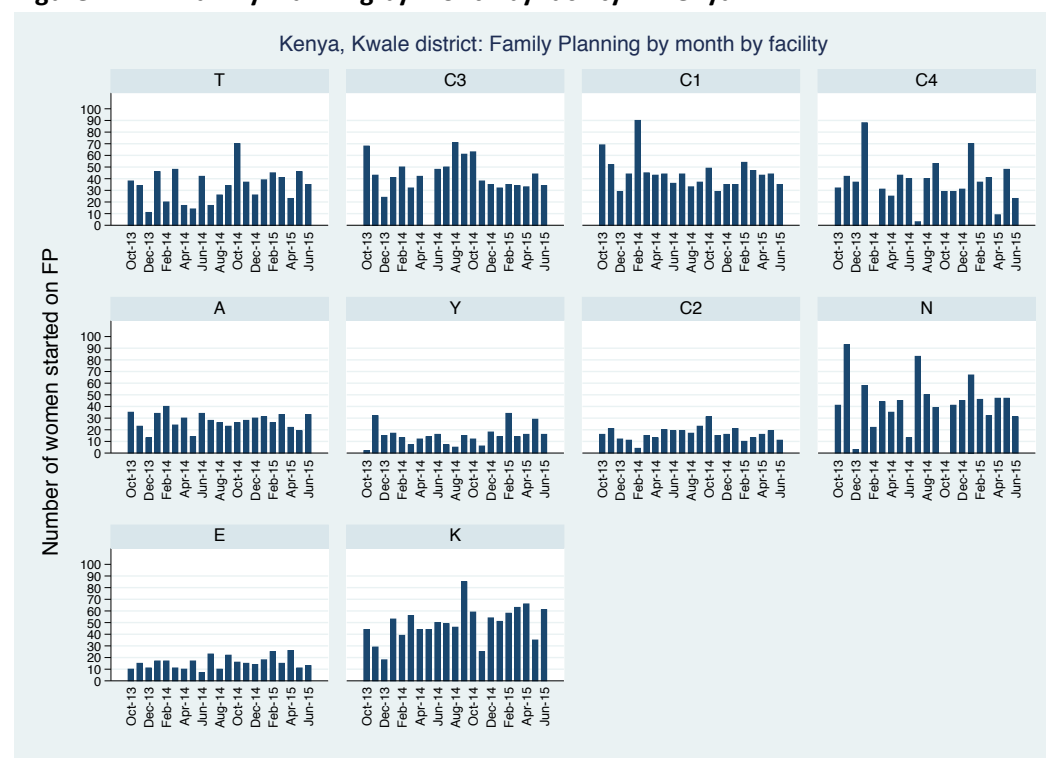
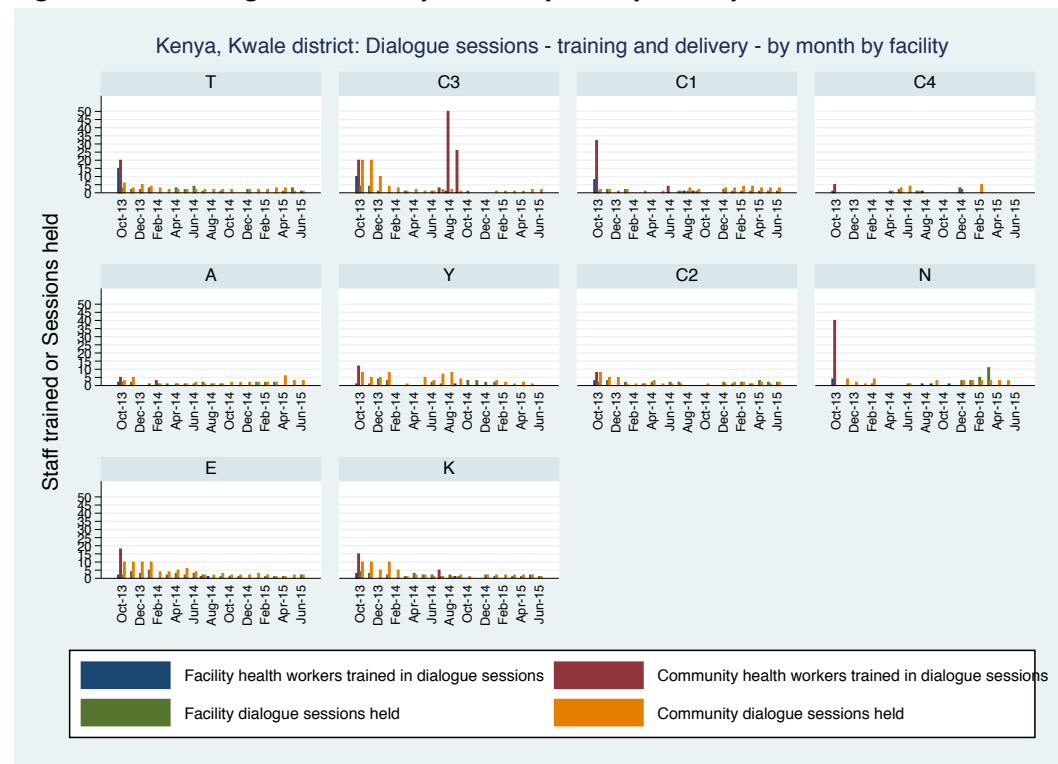


Figure A7.13: Dialogue sessions by month by facility in Kenya



Mozambique

Figure A7.14: Home visit checklist use for women, by facility, Chiúta, Mozambique

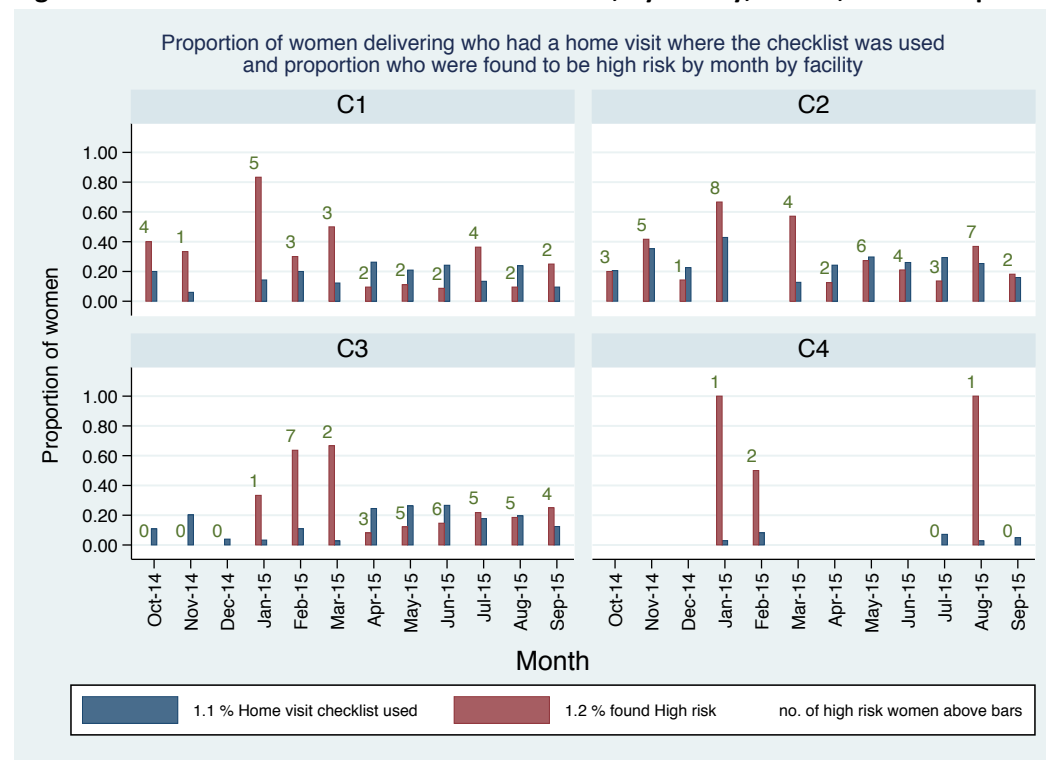


Figure A7.15: Home visit checklist use for babies, by facility, Chiúta, Mozambique

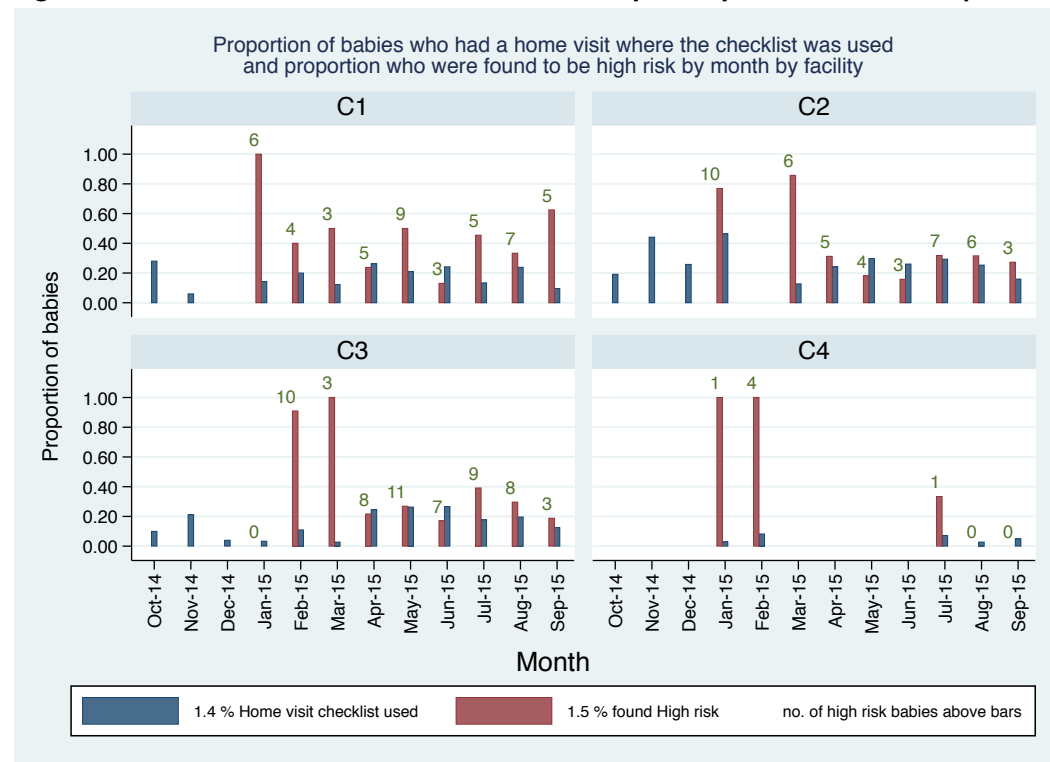


Figure A7.16: Facility checklist use and referrals, women, by facility, Chiúta, Mozambique

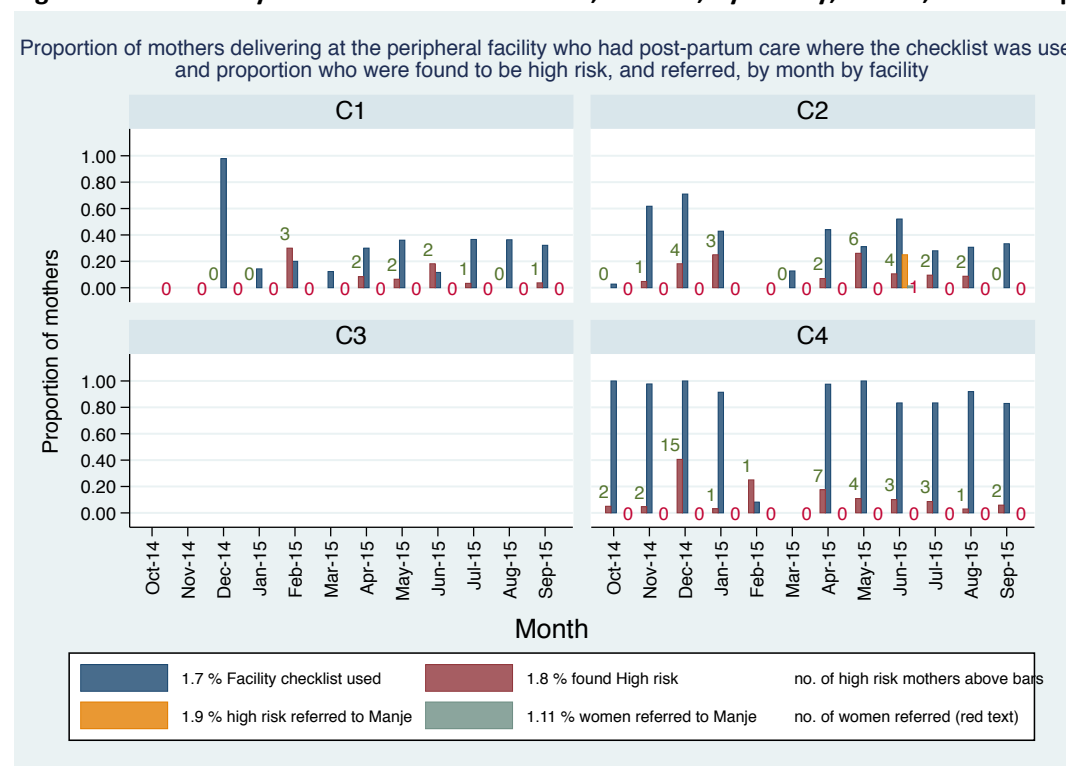


Figure A7.17: Facility checklist use and referrals, babies, by facility, Chiúta, Mozambique

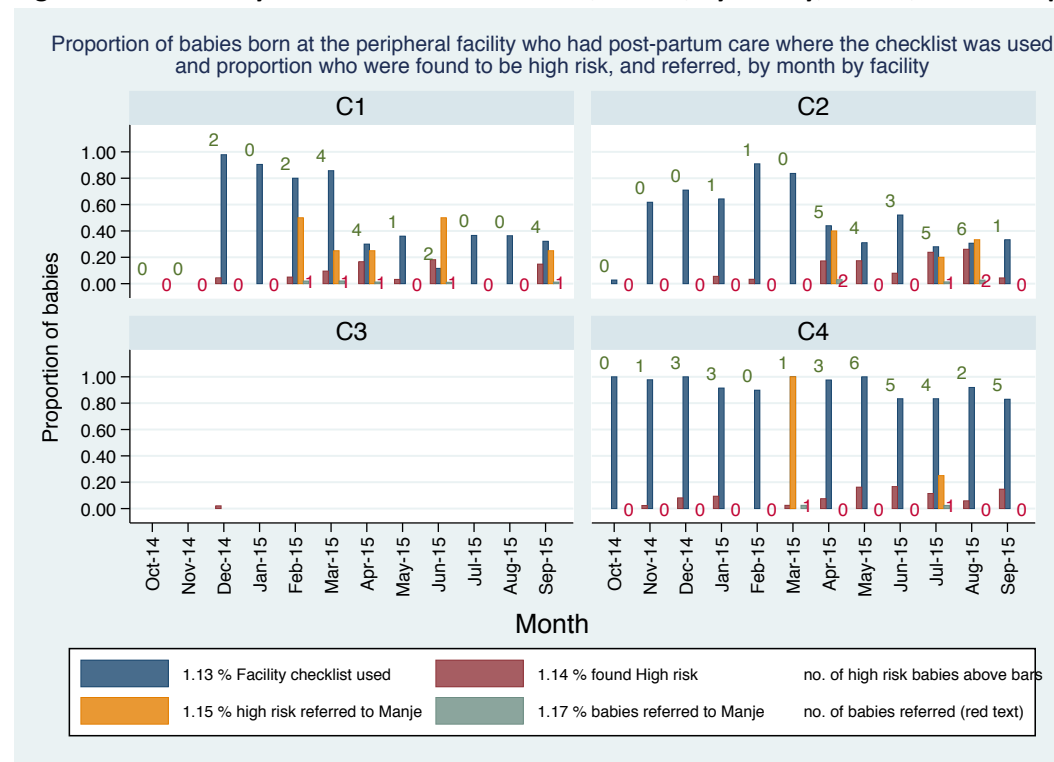


Figure A7.18: Child vaccination clinic and MCH consultation integration, by facility, Chiúta, Mozambique

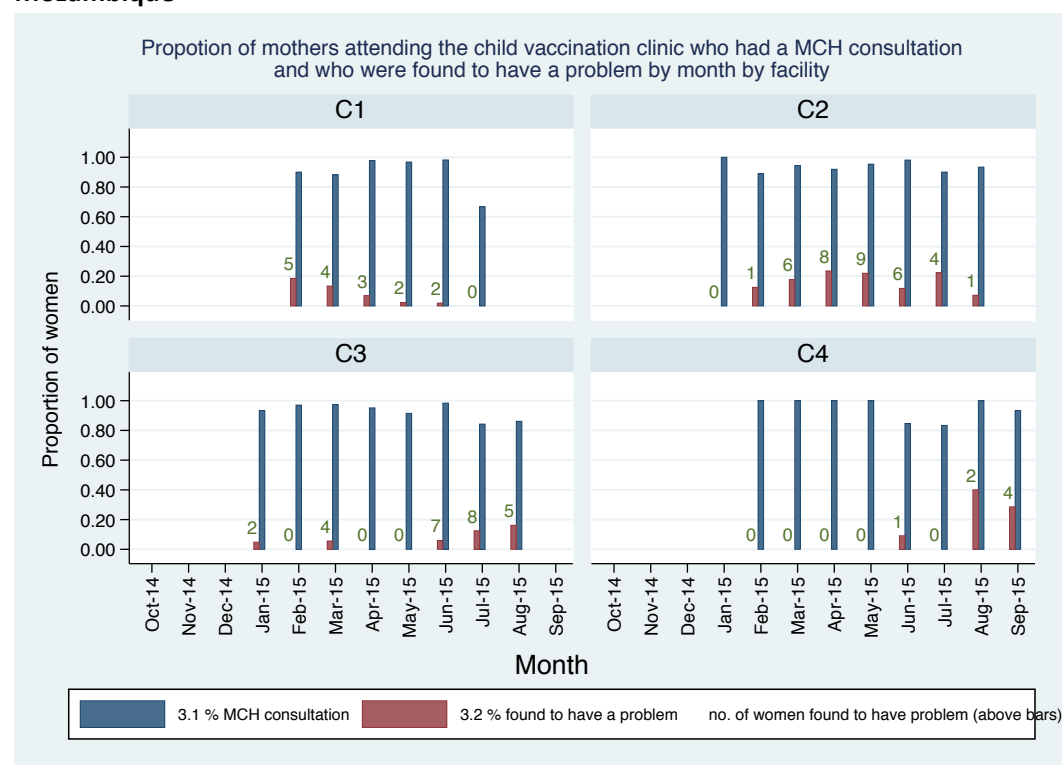


Figure A7.19: PPIUD counselling and insertion, by facility, Chiúta, Mozambique

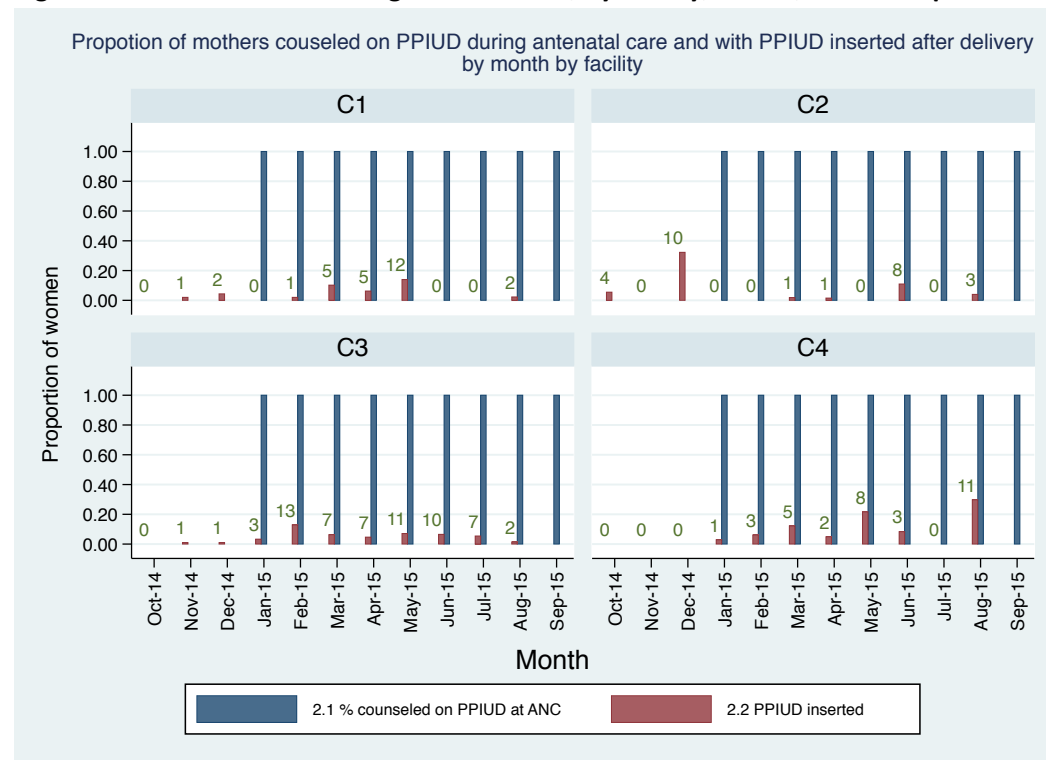


Figure A7.20: Other family planning methods, by facility, Chiúta, Mozambique

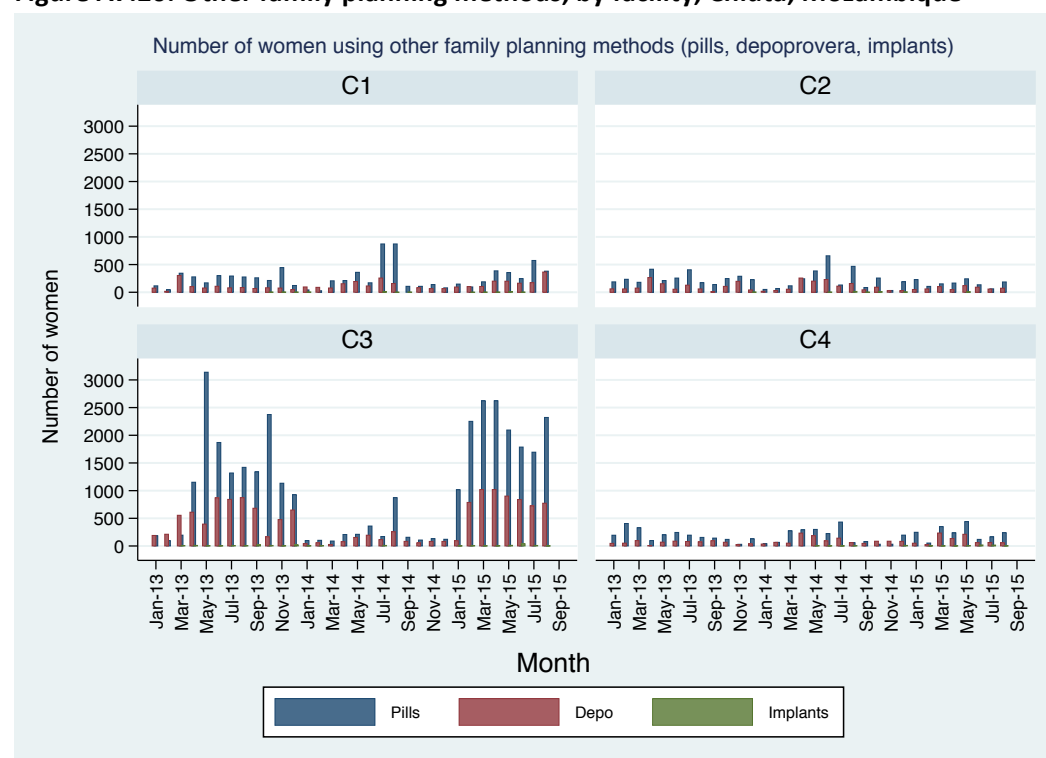


Figure A7.21: Post-partum Anaemia (PPA), by facility by month, Ntchisi, Malawi

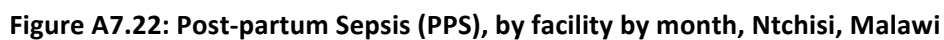


Figure A7.23: HIV diagnosis and management, by facility by month, Ntchisi, Malawi

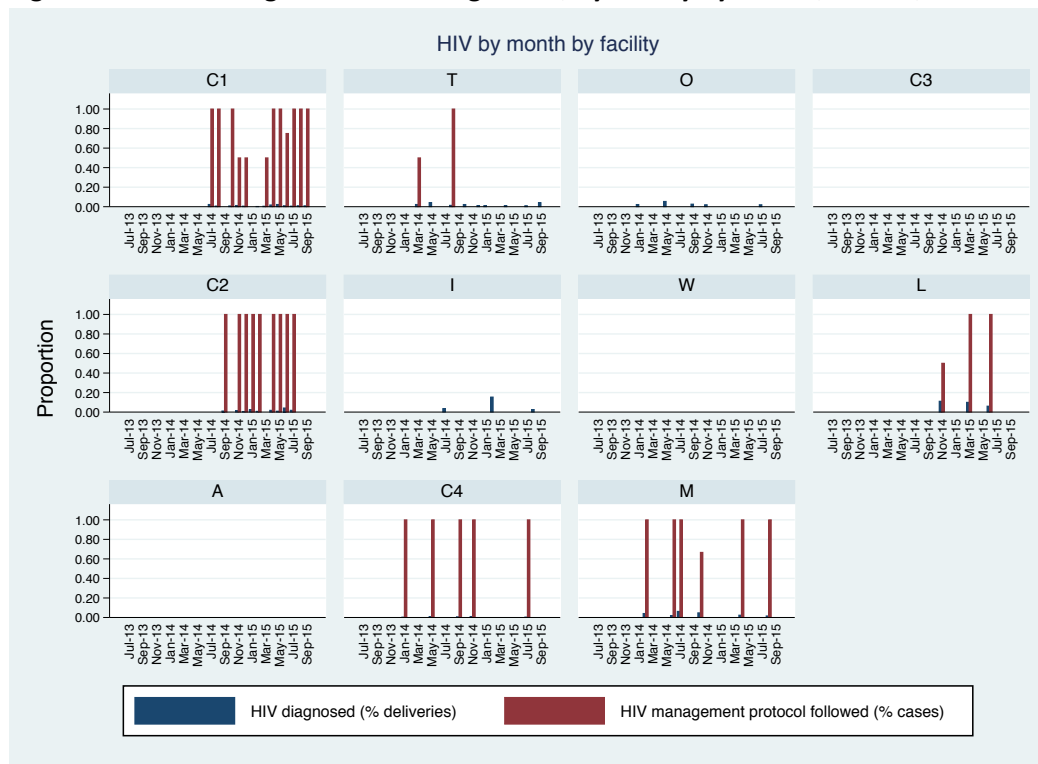


Figure A7.24: Family Planning (FP), by facility by month, Ntchisi, Malawi

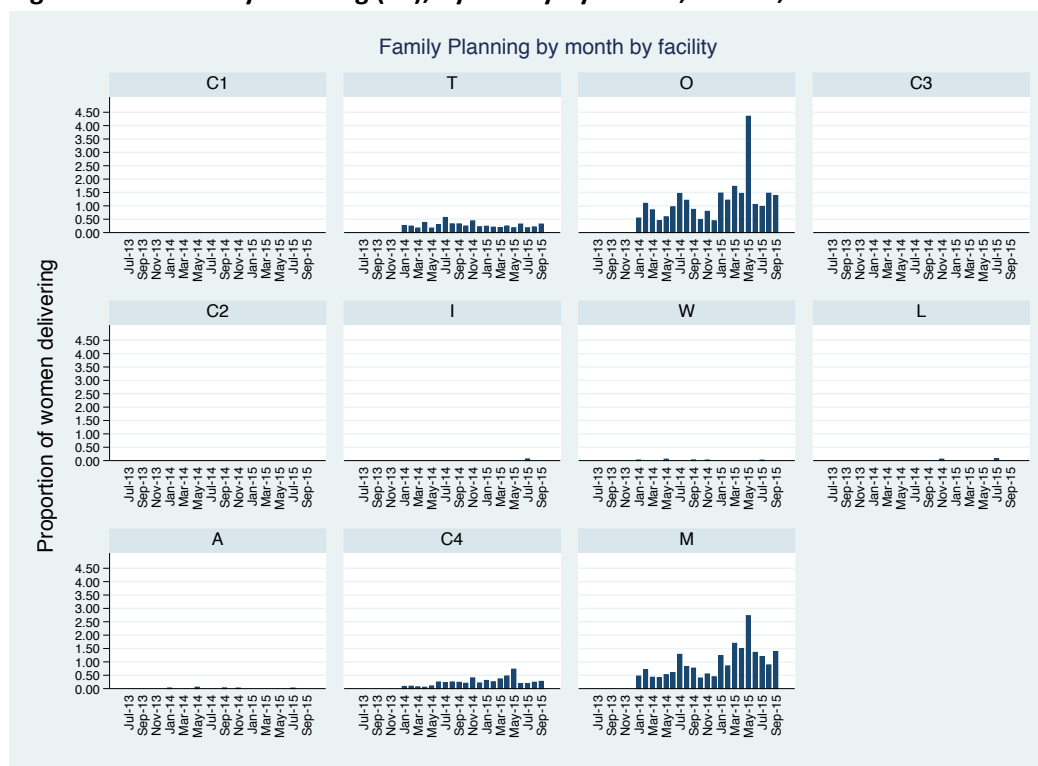


Figure A7.25: Nutrition Check and Counselling, by facility by month, Ntchisi, Malawi

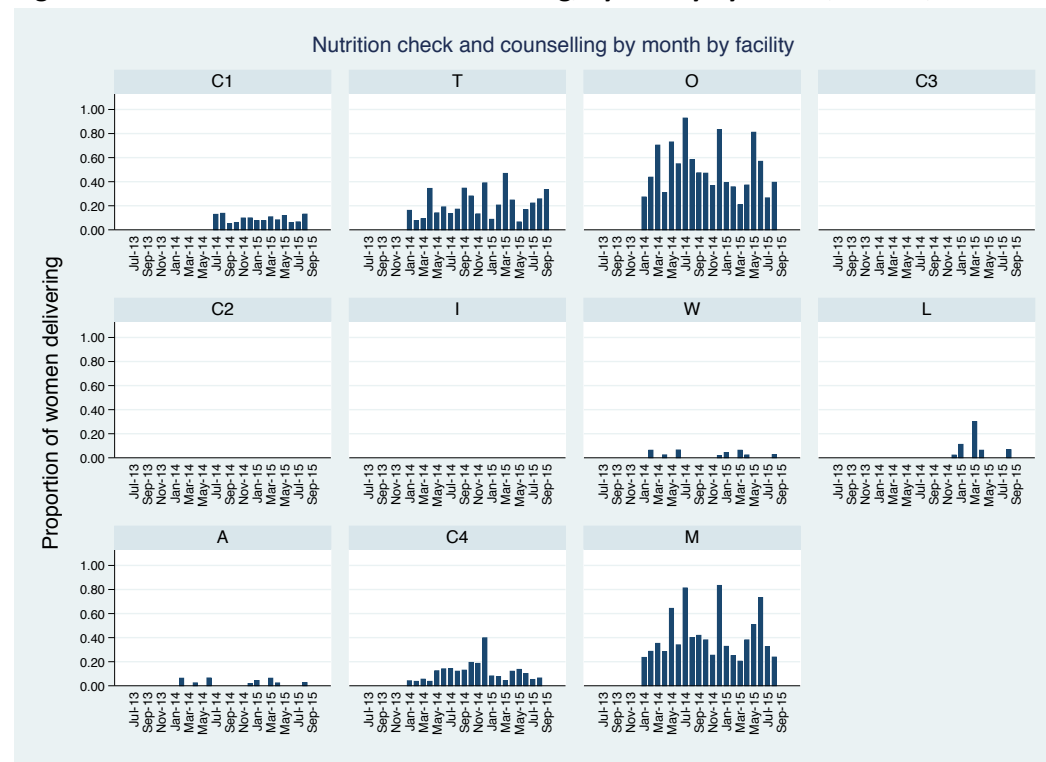


Figure A7.26: Women with abnormal BMI, by facility by month, Ntchisi, Malawi

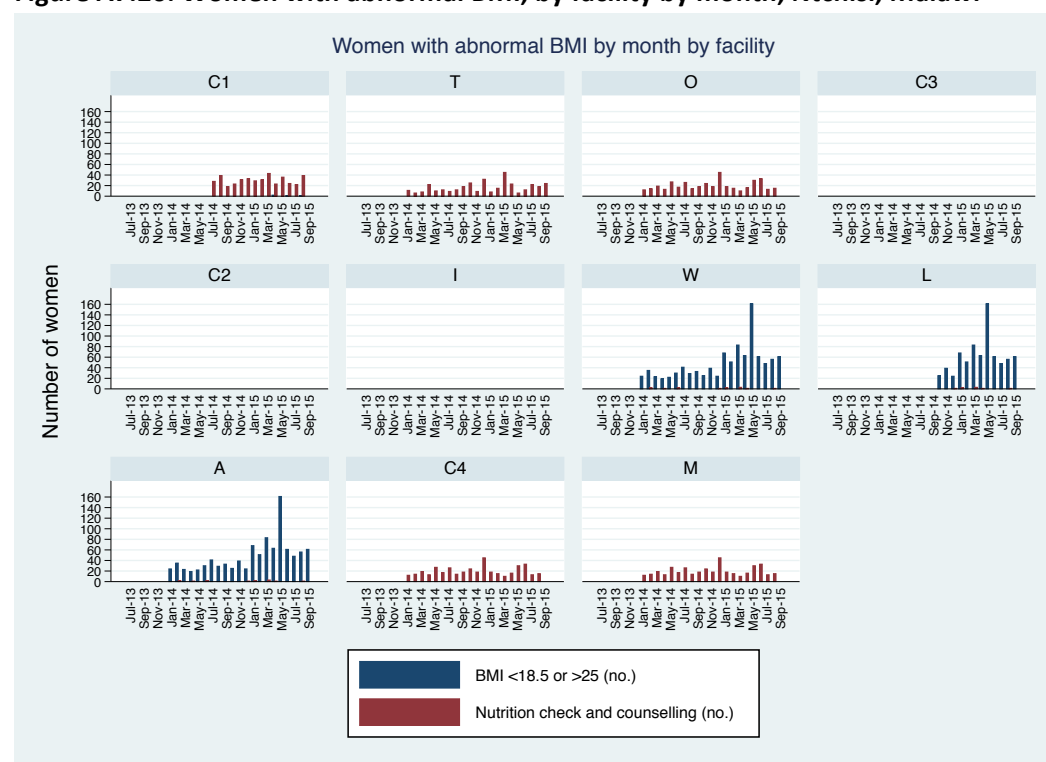


Figure A7.27: Neonatal Sepsis, by facility by month, Ntchisi, Malawi

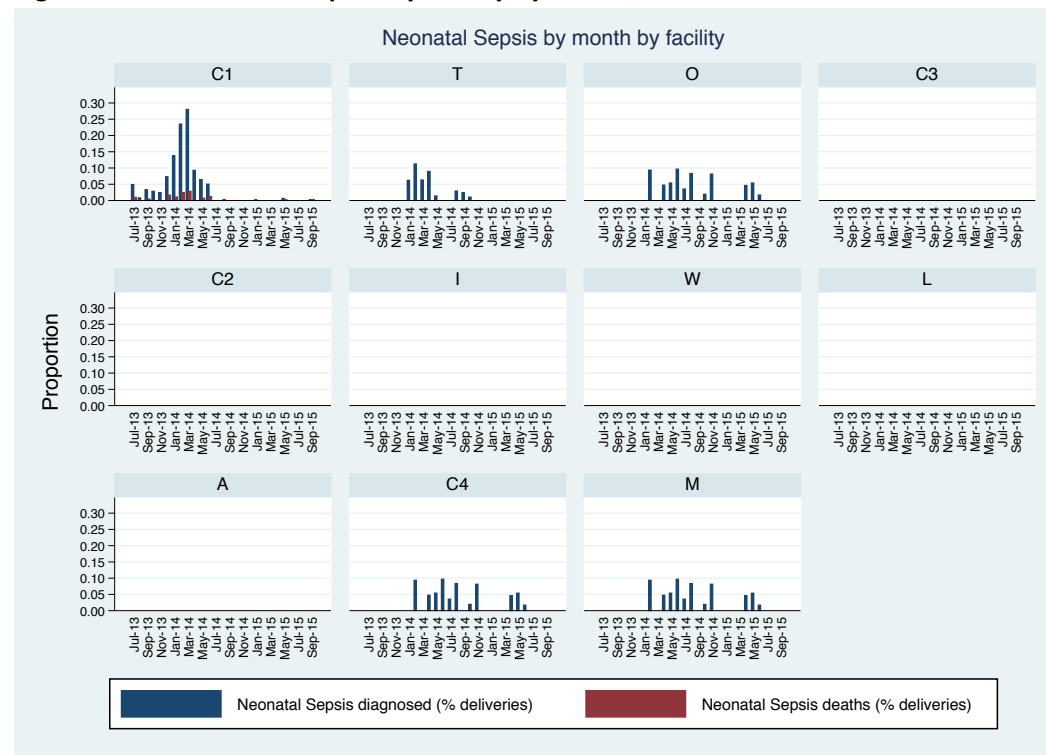


Figure A7.28: Infant Growth and Nutrition, by facility by month, Ntchisi, Malawi

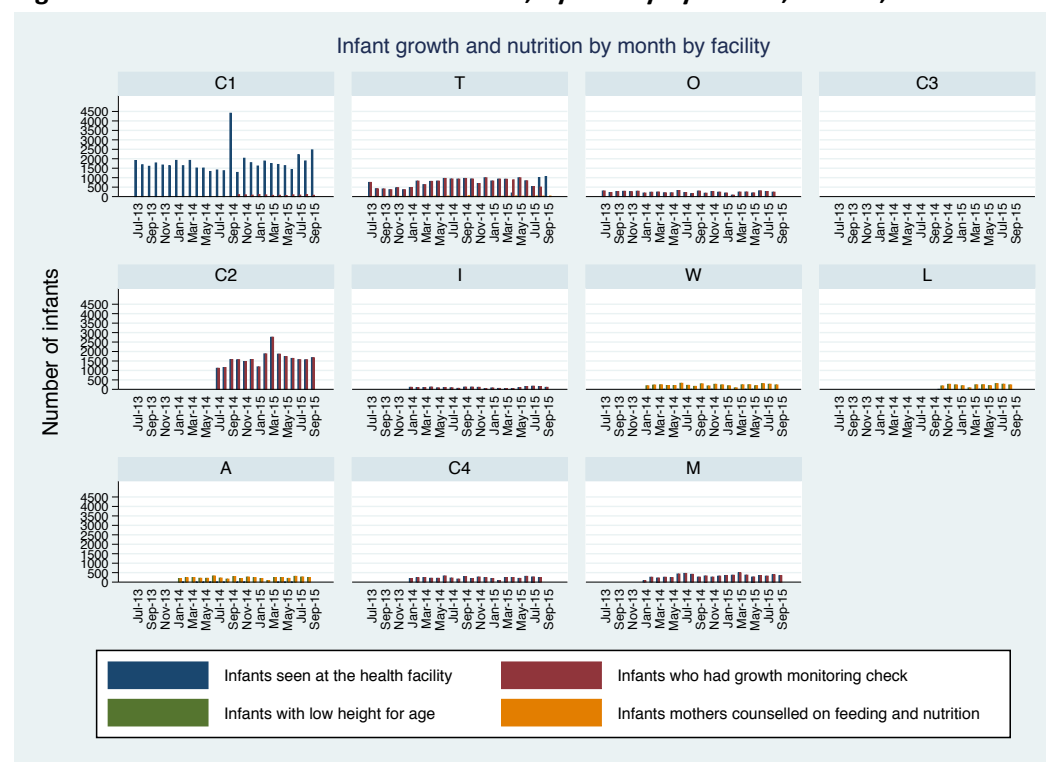


Figure A7.29: Complementary Feeding Counselling, by facility by month, Ntchisi, Malawi

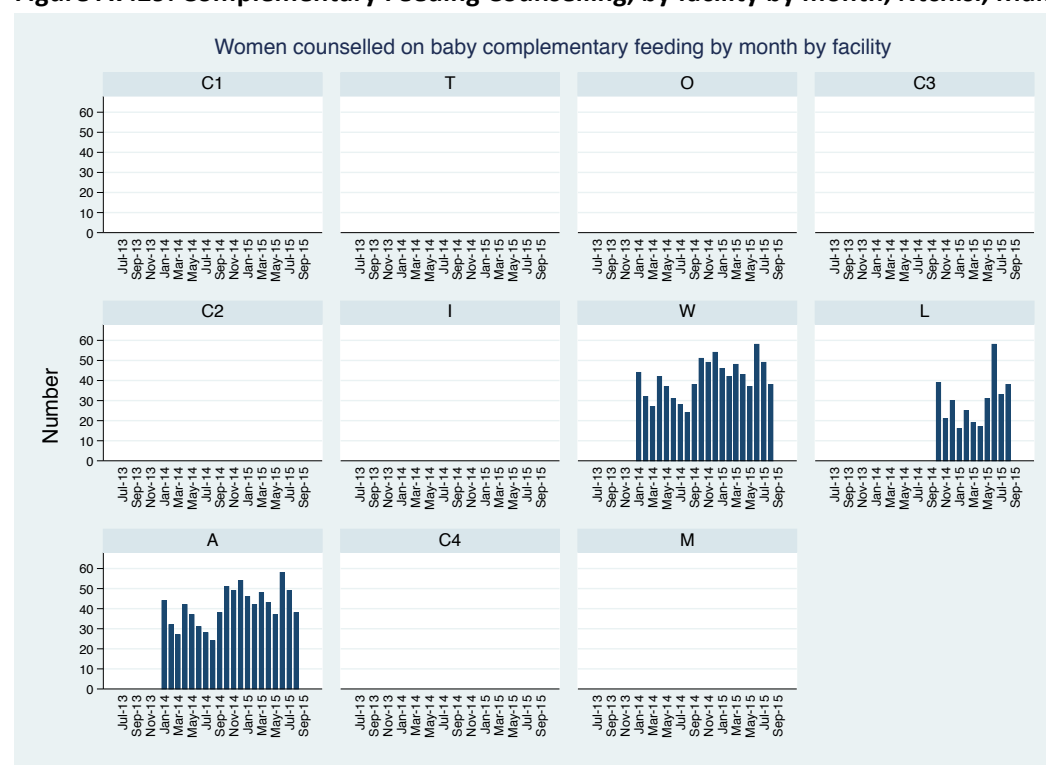


Figure A7.30: Infant Pneumonia, by facility by month, Ntchisi, Malawi

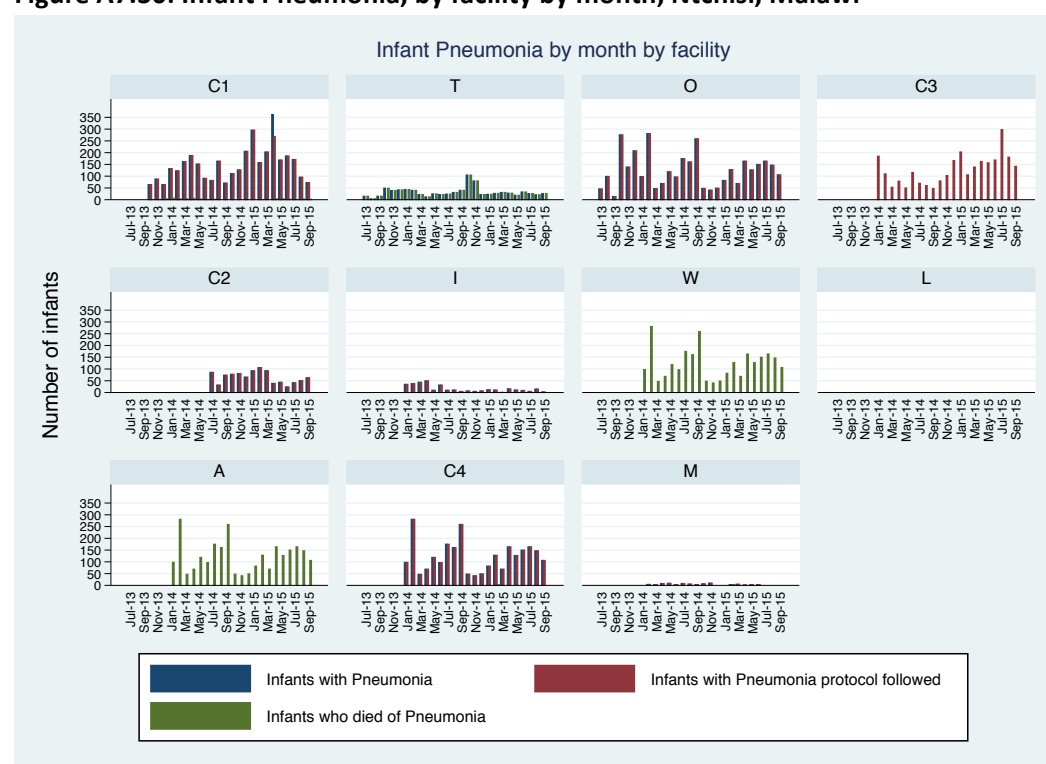


Figure A7.31: Men and Family Planning, by facility by month, Ntchisi, Malawi

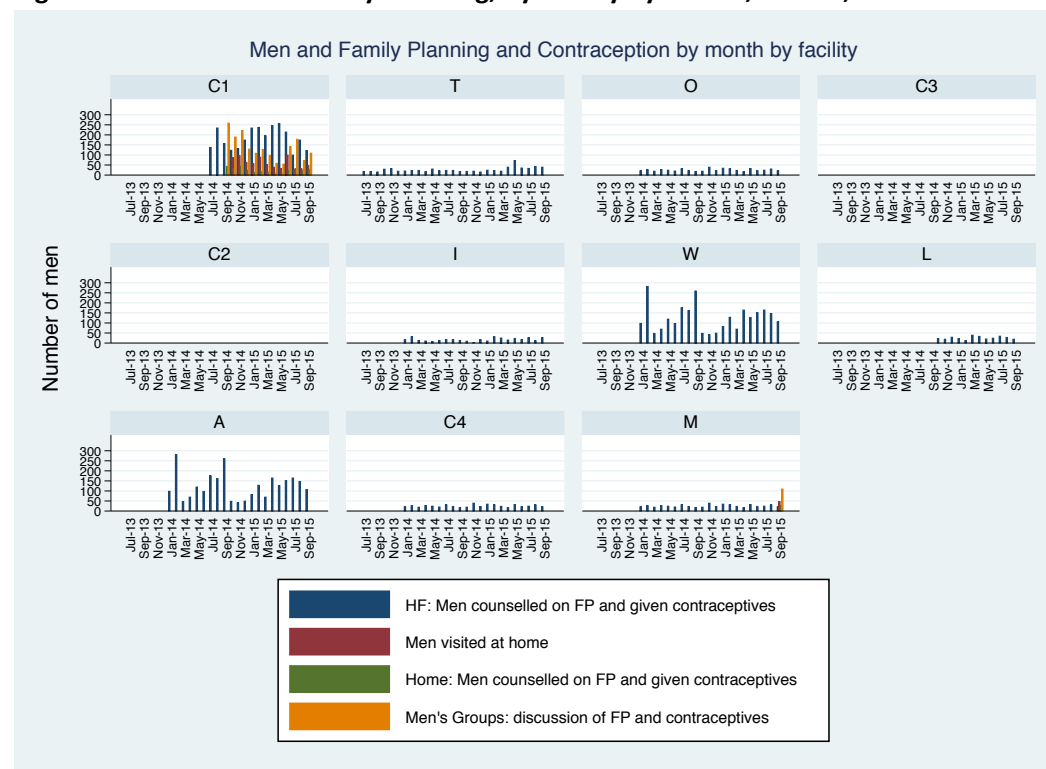


Figure A7.32: Post-Partum Family Planning (PPFP), by facility by month, Ntchisi, Malawi

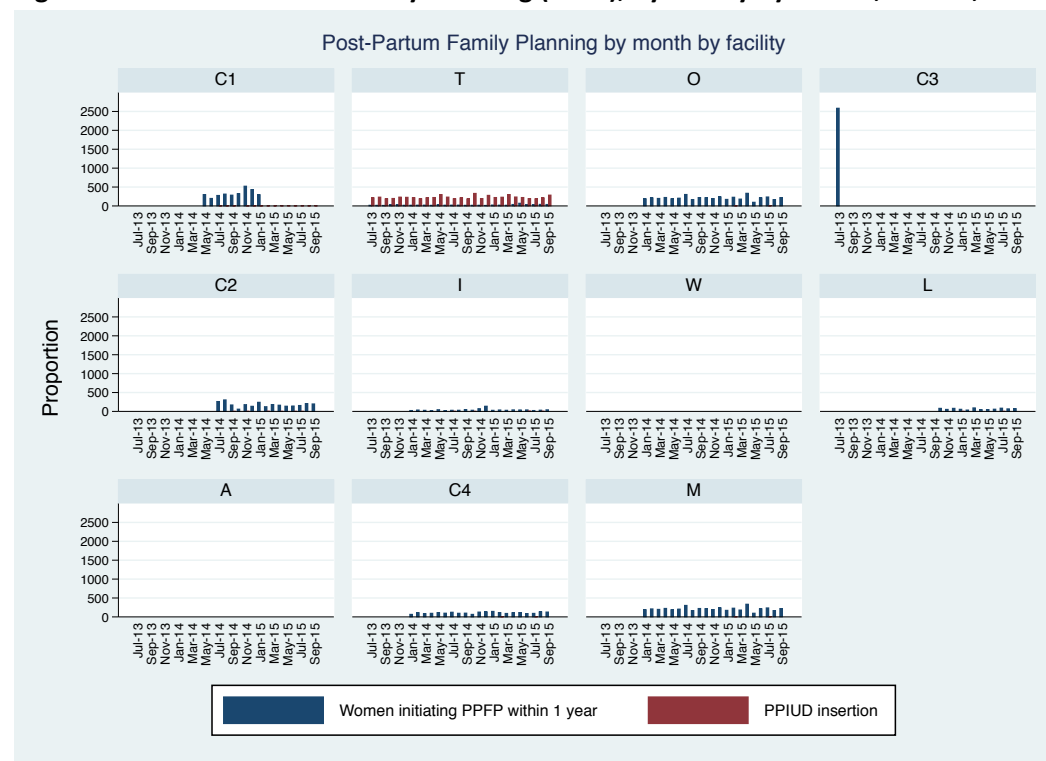


Figure A7.33: Counselling on Breast-feeding in Third Trimester, by facility by month, Ntchisi, Malawi

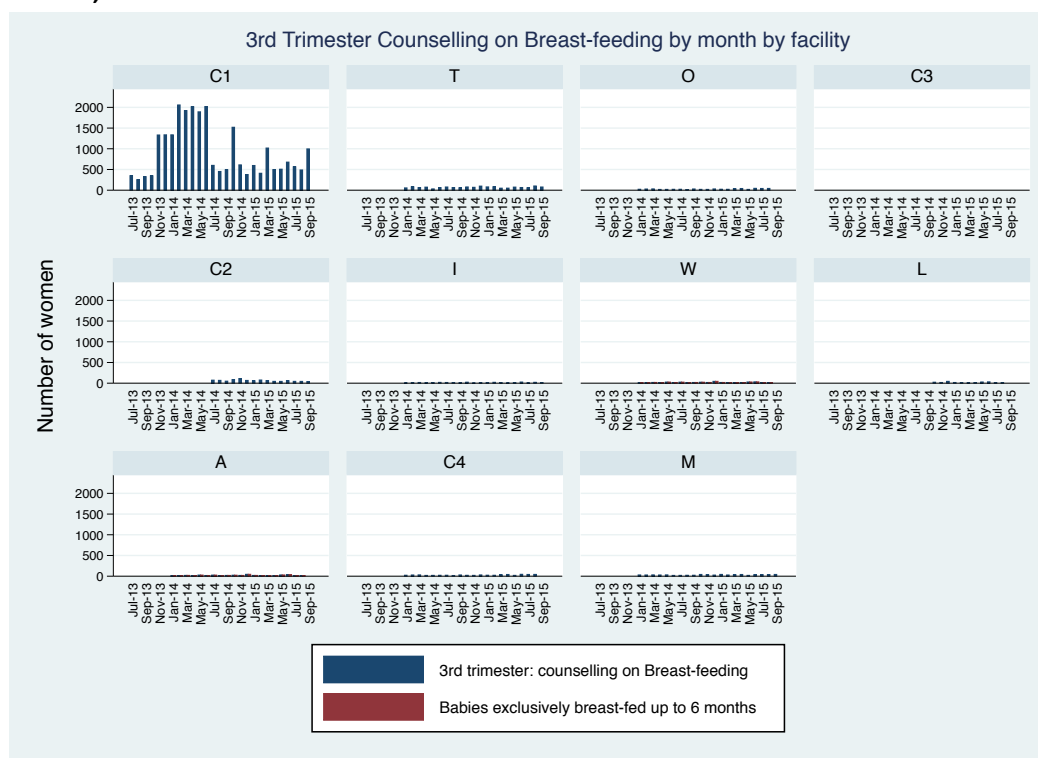


Figure A7.34: Immunisation, by facility by month, Ntchisi, Malawi

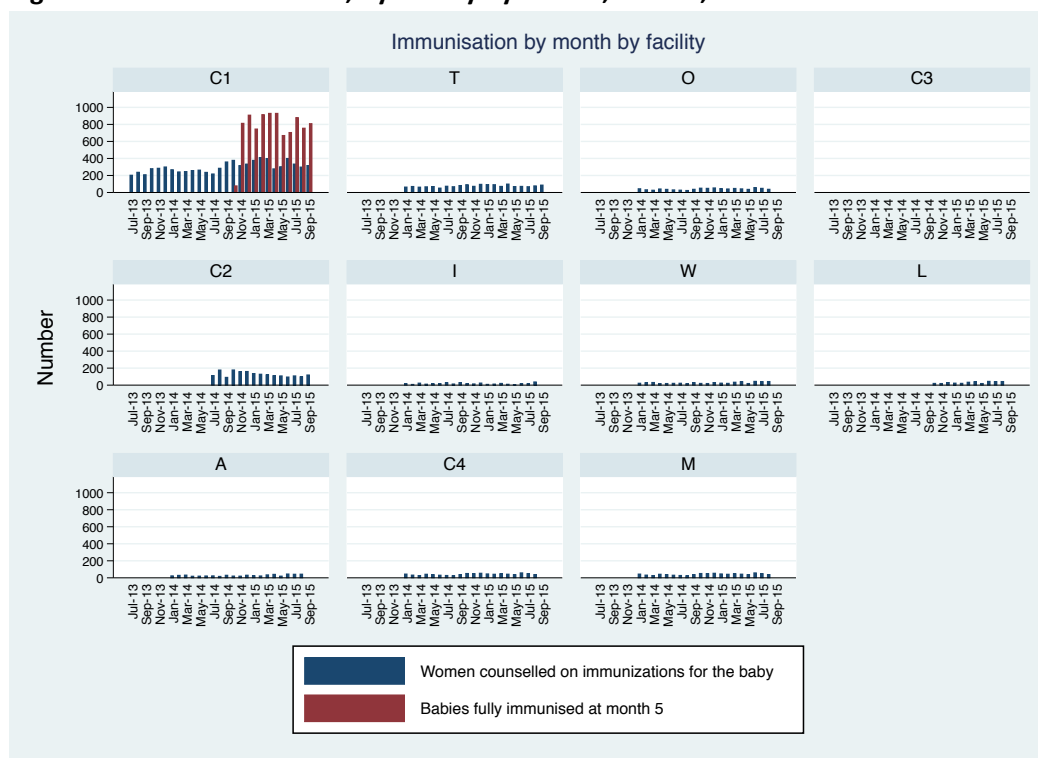


Figure 1 displays 11 bar charts showing the number of women counselled on warmth for the baby (blue bars) and the number of babies with hypothermia (red bars) by month for various facilities. The y-axis represents the number (0 to 400). The x-axis shows months from Jul-13 to Sep-15. The facilities are labeled C1, T, O, C3, C2, I, W, L, A, C4, and M.

Legend:

- Women counselled on warmth for the baby
- Babies with hypothermia

Figure 2 displays 12 bar charts showing the number of women counselled on hygiene for the baby, babies with sepsis, and neonatal sepsis by month for various facilities (C1, T, O, C3, C2, I, W, L, A, C4, M, and an unlabeled facility) from July 2013 to September 2015. The y-axis represents the 'Number' (0 to 400). The x-axis represents the 'Month' (Jul-13 to Sep-15). The legend indicates: Women counselled on hygiene for the baby (dark blue), Babies with sepsis (maroon), and Neonatal sepsis (green).

Facility C1 shows the highest number of women counselled on hygiene, peaking around 400 in late 2014. Facility L shows the highest number of babies with sepsis, peaking around 100 in late 2014. Facility A shows the highest number of neonatal sepsis cases, peaking around 100 in late 2014.

Figure A7.37: Baby Danger Sign Counselling, and Baby Complications, by facility by month, Ntchisi, Malawi

